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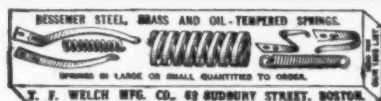
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# THE IRON AGE

THURSDAY, MARCH 5, 1903

## **The American Foundrymen's Association.**

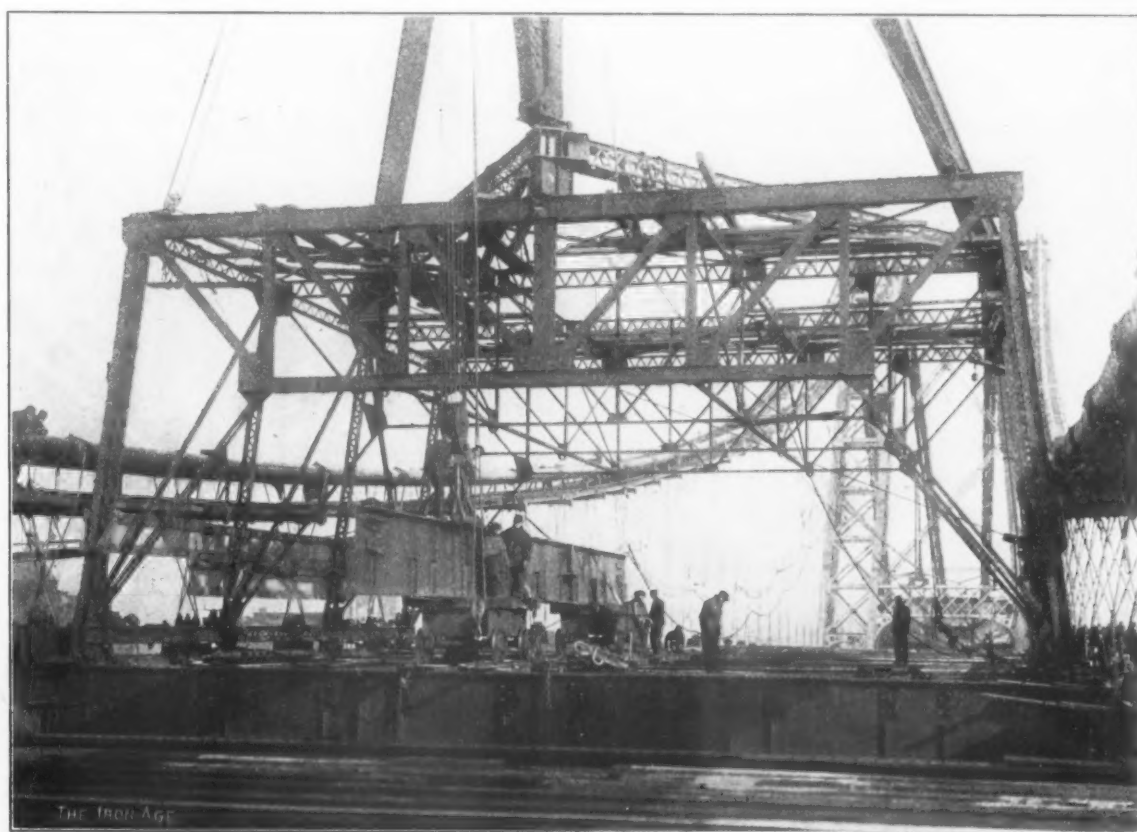
A circular has been issued by Secretary Richard Moldenke stating that a very warm and courteous invitation to hold the next convention at Milwaukee, Wis., has been received from the Foundrymen's Association of that city. The executive board has accepted in the name of the American Foundrymen's Association, and the date has been fixed for June 9, 10 and 11, 1903. The members of the Milwaukee Foundrymen's Association and their wives invite the ladies to attend, and will make every arrangement for their comfort and entertainment. It is hoped that very many ladies will grace

points to talk over, or communicate to the secretary, so that he can arrange for the initiative in the several discussions.

## **The New East River Bridge.**

### **Joining the Main Floor System.**

In previous issues of *The Iron Age* we have described the principal characteristics in the design of the New East River Bridge, now being erected between New York and Brooklyn. The present photographs show the actual condition of the work one week ago and also



*Placing the Last Floor Beam.*

### **THE NEW EAST RIVER BRIDGE.**

the convention with their presence, more especially as the unusual brilliancy of the Boston meeting was in great measure due to the prominent part they took in it.

The secretary requests that short papers on foundry topics be sent in as early as possible to him, so that he can prepare them for distribution at the meeting, and he urges foundrymen to give out their ideas for the general good.

During the year two sections have been formed, to facilitate the convention work, one for the metallurgists and the other for the foundry foremen. There is, furthermore, a general demand for two other sections, one for pattern makers and one for foundry accountants. It is therefore urged that the members take with them or send their foundry and pattern makers' foremen, their chemists and their chief clerks, so that discussions may take place tending toward the establishment of greater uniformity in practice. The practical men of the four divisions just mentioned are asked to jot down a few

convey a good impression of the method of handling the plate girders of the main floor system. The total width of the bridge is 118 feet, but the sidewalk floor beams extend beyond the center beams in the manner of a cantilever or bracket. These side portions therefore project beyond the line of suspender rods from the cables, and there is no cable at each extreme outer side of the structure, as occurs in the old bridge. Another difference in the two designs is in the methods of hanging the suspended portion from the cables. In the old bridge there are four sets of suspenders, one for each cable, and four separate rows of stirrups. In the new there are but two lines of stirrups, one for each pair of cables, so that the entire center space will be free from obstruction by either the cables themselves or their attachments.

The work of placing the center floor beams in position was accomplished by two travelers, which started from each tower and worked toward the center. The travel-

ers ran on rails placed near the sides, and which were, of course, extended as the work progressed. Built down the center was a railroad track, upon which ran trucks which carried the members from the towers to a position to be handled by the derrick ropes, as shown in Fig. 3.

This method of construction is widely different from that pursued in the old bridge. In that case the floor beams were tied to the wire suspenders, then swung out and the permanent connections made. The method was slow, as compared with that now followed, and was attended with a certain amount of danger.

The foot paths just below the cables, shown in all the engravings, were erected after the original platforms had been destroyed by the fire. These were erected to facilitate the placing of the cable coverings. Each cable is bound with sheet steel 1-16 inch thick, this

back will be allowed equal in amount to the duties paid on the imported materials so used, less the legal deduction of 1 per cent. The preliminary entry must show the approximate weight of radiators shipped manufactured under a given formula. The drawback entry must show the exact weight of radiators exported, the cast numbers and the proportions of foreign and domestic pig iron and foreign ferromanganese used in the manufacture of same, as shown by the daily record of manufacture. Said entry must further show the weight of imported materials on which drawback of duties is claimed."

The Department has also prepared regulations for the allowance of drawback of duty paid on pig iron used to the amount of 80 per cent. in the manufacture of gear planers produced by the Gleason Tool Company of Rochester, N. Y., in part as follows:



Fig. 2.—Looking Toward the Center, Showing Both Steel Travelers.

#### THE NEW EAST RIVER BRIDGE.

being substituted for the usual practice of wrapping with wire.

#### Radiator and Gear Planer Drawback Regulations.

WASHINGTON, D. C., March 3, 1903.—The Treasury Department has prepared two interesting series of drawback regulations which involve some novel points. One series, issued upon the application of the American Radiator Company of Chicago, permitting a drawback of duty paid on imported pig iron and ferromanganese used in the production of radiators, involves the determination of the "average results" of the mixture of foreign and domestic materials under conditions which do not permit of the absolute determination of the amount of foreign material in each lot of radiators exported. The Department believes, however, that the regulations fully safeguard the Government, being in part as follows:

"On the exportation of radiators manufactured in part from imported pig iron and ferromanganese a draw-

"On the exportation of gear planers manufactured with a mixture of 80 per cent. imported and 20 per cent. domestic iron, the said proportions being maintained in all cases, a drawback will be allowed equal in amount to the duty paid on the imported material so used, less the legal deduction of 1 per cent. The preliminary entry must show the marks and numbers of the shipping packages and the contents of each package, giving the manufacturing number of each planer, its size, the gross and net weight of each box containing parts of the same planer, which also must be marked on the outside of the package, and the actual net weight of each planer exported, together with the percentage of imported iron on which drawback of duty is claimed, based on such weight."

W. L. C.

**William Swindell & Brothers.**—William Swindell & Brothers, German National Bank Building, Pittsburgh, Pa., completed last week the furnace equipment for the new 12-mill sheet plant of the Sharon Steel Company; also the furnace equipment for the open hearth and bar mill plant of the Sharon Steel Hoop Company.



Sharon, Pa. They are working on a new tube plant for the Page-Hersey Iron and Tube Company, Guelph, On-

Ohio, the Adams Crucible Steel Company, Redington, Pa., C. G. Hussey & Company, Pittsburgh, Pa., and

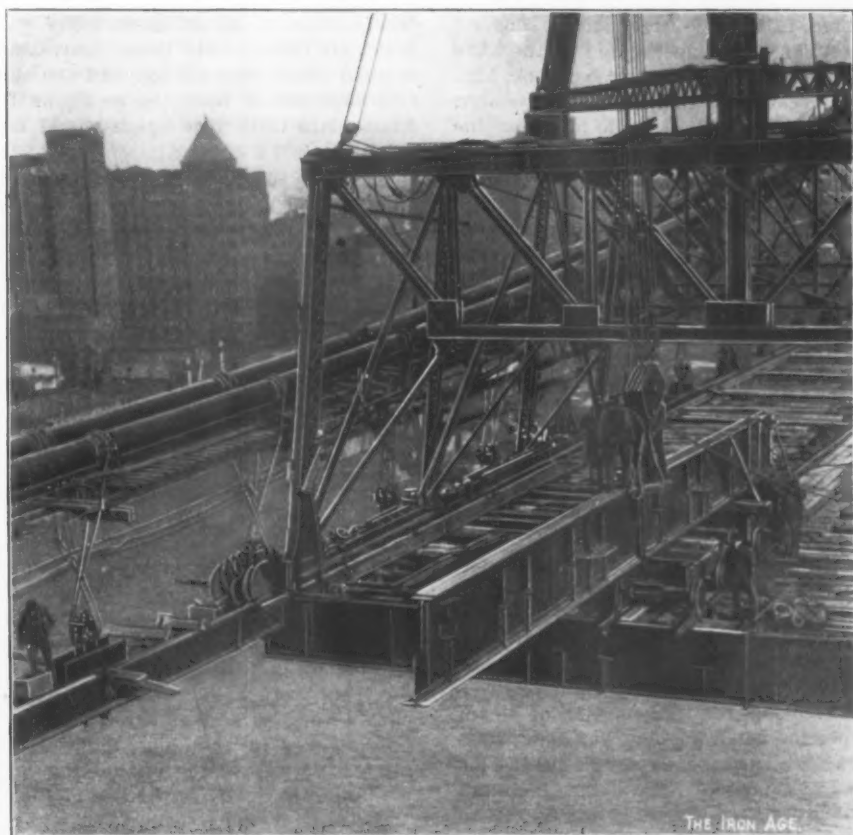


Fig. 3.—Swinging the Last Floor Beam into Position.



Fig. 4.—Looking Toward One of the Towers.

THE NEW EAST RIVER BRIDGE.

tario, two separate furnace plants for the General Electric Company, Schenectady, N. Y., the furnace equipment for the new Columbia Steel Company, Elyria,

Superior Steel Company, Carnegie, Pa. They are also installing over 100 Swindell patent water seal gas producers in glass plants in Ohio, Indiana and Illinois.

## The Use of Highly Superheated Steam.\*

BY PROFESSOR EWING.

The remarkable results which have been achieved by Easton & Co., Limited, in their development in England of the Schmidt system of using superheated steam have directed general attention to the advantages of high superheat. A report recently published in the *Engineer*, January 9, describing trials which I made of an engine built by Messrs. Easton at the works of the British Xylonite Company, at Manningtree, has attracted the notice of several correspondents, whose letters lead me to think that an article dealing briefly with some general points may be useful.

The main point for consideration is, of course, the economy of heat, and therefore of coal, which the use of high superheat allows us to accomplish. Now on this point it is important to remember that there are always two factors in economy of coal—namely, the engine efficiency and the boiler efficiency. I use the words "boiler efficiency" in a sense wide enough to include the superheater. We have, in fact, to consider two distinct questions: 1, How much steam does the engine use per horse-power hour; and, 2, how much coal is used in generating and superheating that steam?

Further, in judging of the real significance of an engine trial as to possible economy of coal, we shall find it useful to infer from the steam used what the consumption of coal would have been if the boiler and superheater conditions had been as favorable as experience in other instances satisfies us they might be.

In the Manningtree trials the consumption of steam was just 9 pounds per indicated horse-power hour when the engine was working at its most favorable load. This was steam generated at 140 pounds per square inch and superheated to 800 degrees F., or, say, 440 degrees above the temperature of formation. If we take the usually accepted value for the specific heat—namely, 0.48—these 440 degrees of superheat represent an addition of 211 units of heat per pound of steam. In generating saturated steam at this pressure from a feed temperature of, say, 75 degrees F. the amount of heat taken up is 1149 units. Then, to superheat the steam requires 211 units more, which is  $\frac{1}{5.5}$  of the heat taken up in the boiler. The total heat required to generate and superheat each pound is therefore 1360 units.

Thus, under favorable conditions of superheating, we ought not to require to burn more than, say, one-fifth more coal to form each pound of the highly superheated steam than is required to form each pound of saturated steam.

There is no doubt that this can be done. To do it, however, requires that the furnace gases, after leaving the superheater at a comparatively high temperature, must have further heat extracted from them by means of a feed heater. In my trials of a Schmidt plant near Amsterdam this was done so effectively that the furnace gases, after passing a superheater in which the steam was heated to about 750 degrees F., were made to give up heat to a Schmidt economizer to such good purpose that before escaping to the chimney their temperature was lowered to 347 degrees F. In that instance I found that to generate steam at a pressure of 140 pounds, and to superheat it—to 742 degrees F.—required only 0.126 pound of coal per pound of steam. At Manningtree—with only a slightly higher superheat—it took 0.157 pound of coal per pound of steam. The main reason for this difference is that at Manningtree there was no economizer. Both from the boiler furnace and from the superheater—which was separately fired—the gases escaped at a comparatively high temperature, carrying away heat which might usefully have been saved. Moreover, at Manningtree the boiler and also the superheater were designed to serve two engines, whereas only one engine was running during the trials, and in this respect also the conditions were unfavorable to economy of coal. Further, the coal used at Manningtree

was of comparatively poor quality. Its average thermal value, taking boiler and superheater coal together, was only 12,970 thermal units per pound, so that 1 pound of it was equivalent to only 0.86 pound of standard coal, having a thermal value of 15,000 units. Actually the consumption of coal at Manningtree was 1.41 pounds per indicated horse-power hour, equivalent to 1.22 pounds of such standard coal; but had the conditions of boiler and superheater been the same as they were in my Amsterdam tests this figure would have been reduced much below 1.2 pounds.

Again, to realize what the results of the trial at Manningtree mean, it is useful to remember that the 9 pounds of superheated steam which were used there per indicated horse-power hour were equivalent, in the quantity of heat they conveyed to the engine, to only 10.65 pounds of saturated steam. It is this figure which should be compared with the consumption in an engine using saturated steam. And, further, the 15 pounds of superheated steam used at Manningtree per electrical unit are equivalent to 17.7 pounds of saturated steam per electrical unit. These figures, moreover, were reached in an engine of only 300 horse-power.

The trials only emphasize and confirm what has been proved before, that not only as regards consumption of steam, but as regards consumption of heat and of coal, there is a striking advantage in using high superheat. To what is this remarkable advantage due? Why is it that, by adding only one-fifth or one-sixth to the heat which the steam has already taken up in the boiler, we are able to make the steam do more than 50 per cent. additional work in the cylinder? There is, of course, a small theoretical advantage from the fact that some heat is taken in at a high temperature, but this goes only a little way to account for the very large practical advantage that follows the use of high superheat.

The answer, apparently, is that by using high superheat we escape in great part both of the two chief sources of loss in the action of saturated steam. These are: 1, The loss which arises through alternate condensation and re-evaporation in the cylinder; and, 2, the loss which arises through leakage at valves, pistons and sliding surfaces generally, and especially through direct leakage from the steam side to the exhaust, such as occurs in an ordinary slide valve. Of these two actions, the first is now so well known that I need not dwell on it; but the second action is not so generally appreciated. It was first, I think, brought into prominence by the researches of Callendar and Nicholson (*"Min. Proc."* Inst. C. E., 1898). They have shown that, however tight a slide valve may be while standing still, it leaks while running, a film of water finding its way from the steam side to the exhaust between the sliding faces. The wetter the steam the more serious does this leakage become. My attention was particularly drawn to the advantage of superheating in checking leakage of this kind in tests which I made of another engine furnished with piston valves, and using triple expansion. There the saving effected by changing from saturated to superheated steam was enormous, and it was to be ascribed in large measure to the fact that with saturated steam the leakage past the piston valves had been great. By superheating to 575 degrees F. the consumption of steam in that engine was reduced for the same output by 42 per cent.

It is one of the striking advantages of high superheat that when properly applied to a rather inefficient engine it cures it of its conspicuous defects, and makes it highly efficient. It enables comparatively small engines to compete in efficiency with engines of the largest size, and it gives excellent results without the complications of triple expansion. The engine tested at Manningtree was a two-cylinder compound.

To obtain the full advantage of superheating, it is essential that the steam should be superheated before each of the two stages in its compound expansion. The steam in the intermediate receiver, which has become saturated, or even wet, during its first expansion, must be again superheated before admission to the low pressure cylinder. Schmidt secures this in a simple and ef-

\* From the London *Engineer*.



fective manner by using the live steam, on its way to the steam chest, as a vehicle to convey heat to the receiver. The temperature to which the steam supply is superheated in the first instance is limited only by considerations of safety and durability on the part of the superheater, and may be as high as 800 degrees F. But before admission to the cylinder it has fallen below 600 degrees F., mainly by transfer of a portion of its heat to the intermediate steam, and in this way a favorable distribution of the superheat is secured as between the two cylinders, with the result that the steam remains dry, or nearly dry, in its whole passage through the engine.

On the question of durability, there is now ample experience to show that high superheat, when used as Schmidt uses it, does not involve any excessive wear and tear either of engine or of superheater. The introduction of Schmidt engines into England is comparatively recent, but in Germany and elsewhere they have been used long enough to demonstrate their durability. I have before me letters from various users of Schmidt plants on the Continent, who one and all bear testimony to the small cost of maintenance and absence of need of repairs during periods of use which extend in some cases to more than seven years. In more than one instance the plant has been working night and day during that time. The wear and tear of the engines are "not greater than in the case of ordinary steam engines of good quality." The superheaters "have proved thoroughly satisfactory, and no repairs have been necessary." "None of the superheater coils have up to now been replaced, and all are intact."

A great extension of the use of highly superheated steam may confidently be looked for when such facts become better known among English engine users, and when they realize not only the advantages which high superheat secures in economy of steam and of coal, but also the simplicity of the means by which this economy is brought about.

### New Publications.

**Self Propelled Vehicles.** By James E. Homans. Published by Theo. Audel & Co., New York. Octavo, 632 pages. Illustrated. \$2.

The author first devotes several short chapters to the proper designations of motor driven carriages, and to the history of construction from the days of Nicholas Cugnot (1769) through the past century down to the present time. The several peculiar features of these early vehicles, all of which were steam driven, are treated in turn. Under the caption of "How a Motor Carriage Turns," a full discussion is given of the use of compensating or differential gears. It is explained how it is possible to maintain a steady drive of the motor while the two driven wheels are turning at different speeds. "Steering a Motor Carriage" deals with Ackerman stud axles and other pivoted arrangements on the front wheels, and also with the various familiar steering connections and the situations involved in securing the proper arcs of turning on the steer wheels. These are important matters, which, although commonplace to the practical carriage builder or chauffeur, are novel and somewhat perplexing at the start. Similarly complete and accurate treatment is accorded motor carriage under frames, springs, wheels and tires. The chapter on the use and effect of pneumatic tires gives the various reasons of authorities for preferring this form of support for high speed vehicles to either metal or solid rubber. There is a full discussion of the constructional problems involved in securing the needed resiliency, as well as of the principles of care and repair. The design of the several types of vehicle motors—steam, gasoline and electric—are then treated. Under the head of steam engines is given a complete treatment of the various types of steam generators and their advantages. The important subjects of boiler feeders, water level regulators and of liquid fuel burners and feed regulators are dealt with in two extended chapters. Several of the best known makes of steam carriage are described and illustrated in detail. A valuable feature of

the work is the elaborate treatment of the theory and construction of gas and gasoline engines. Electric vehicles receive the same comprehensive care. The book contains nearly 500 illustrations, and closes with a very complete index.

### The Manufacture and Properties of Iron and Steel.

By H. H. Campbell. Published by the Scientific Publishing Company. Price, \$5.

Some years since Mr. Campbell, who is general manager of the Pennsylvania Steel Company at Steelton, published a work on Structural Steel, which was promptly recognized in the profession as one of exceptional merit. It was, however, relatively narrow in its scope. What is designated as a second edition has now appeared. It is really an injustice to apply that term to it since the work has been so much amplified and the original text has been so thoroughly revised that the whole is practically a new book. We believe that this fact should be insisted upon since Mr. Campbell's latest volume will be studied with great interest by many to whom the former one did not necessarily appeal. Mr. Campbell's latest effort is very much more ambitious, and as will be noted from the following summary of its different parts, covers ground which the usual professor's treatise on metallurgy does not pretend to go over. Part I is entitled "The Main Principles of Iron Metallurgy," and is an almost popular review. A more detailed and technical discussion constitutes Part II, while Part III is entitled "The Iron Industry of the Leading Nations." We may pass over the first part with the brief statement that it admirably fulfills its function. It is the second part, or the Metallurgy of Iron and Steel, which really constitutes the main part of the volume, in which Mr. Campbell's thorough equipment as a master of theoretical knowledge and as one long closely identified with actual practice most comes into play. It is in these chapters, too, that his acute and critical mind and his admirably straightforward presentation of his objections are most effective. Mr. Campbell takes up the blast furnace first and presents in a particularly effective manner the chemical reactions in the furnace. In discussing the definition of steel, Mr. Campbell plunges his dagger into the corpse of the 1876 classification. His description of the basic and Bessemer processes is excellent, but it is when he deals with his own special branch of open hearth steel manufacture that Mr. Campbell is most interesting and convincing. His analysis of the advantages of the tilting furnaces is acute, and his review of the claims of the Talbot continuous process a very fine piece of argument based on theoretical reasoning. Mr. Campbell discusses the cost of the Bessemer and open hearth processes in the light of what he calls "increments," which includes all the augmentations of cost due to purely metallurgical conditions, like the waste in blowing in a Bessemer converter. Highly interesting chapters are those on segregation, on the influence of hot working on steel, heat treatment and the influence of chemical constituents on steel.

The third part, on the iron industry of industrial nations, shows close observation and careful study, but it is fragmentary and really ought to be expanded into a volume by itself. We have been particularly interested in a general discussion of "the Question of Management," which forms a part of the introduction to this part of the book. Many truths are told in straightforward manner, which should be brought home to iron makers on both sides of the Atlantic. We cannot help believing that the trained and practical metallurgist who is broadminded enough to study general economic conditions is best qualified to judge of them. Those who have been exclusively bred in the commercial and financial school miss too many points of overshadowing importance, technically, to have the right perspective.

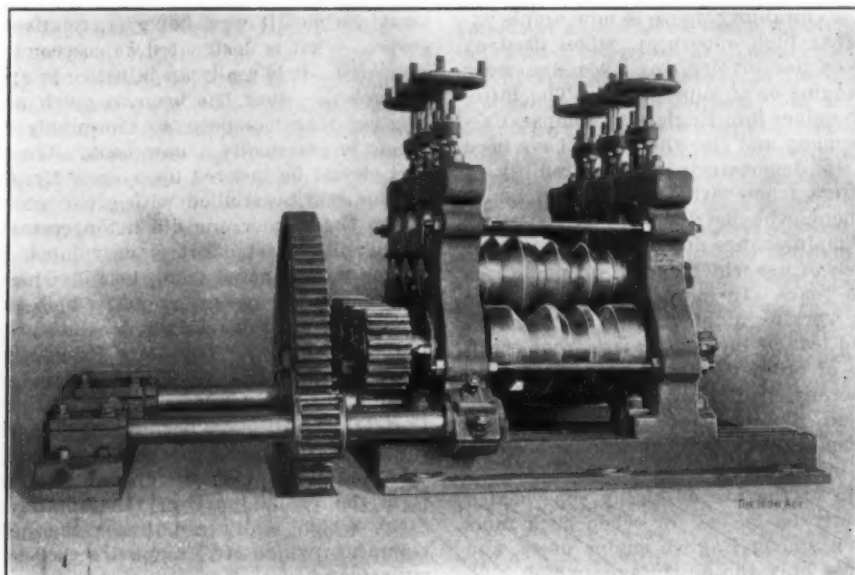
We congratulate Mr. Campbell on having, by evidently tireless industry, given to the American iron trade a volume which every member of it must for his own sake read with the closest attention, whether he agrees with the author in many respects or not. Since the days of Howe's metallurgy nothing that can compare with it in value has appeared in the English language.

### New Angle Straightening Machines.

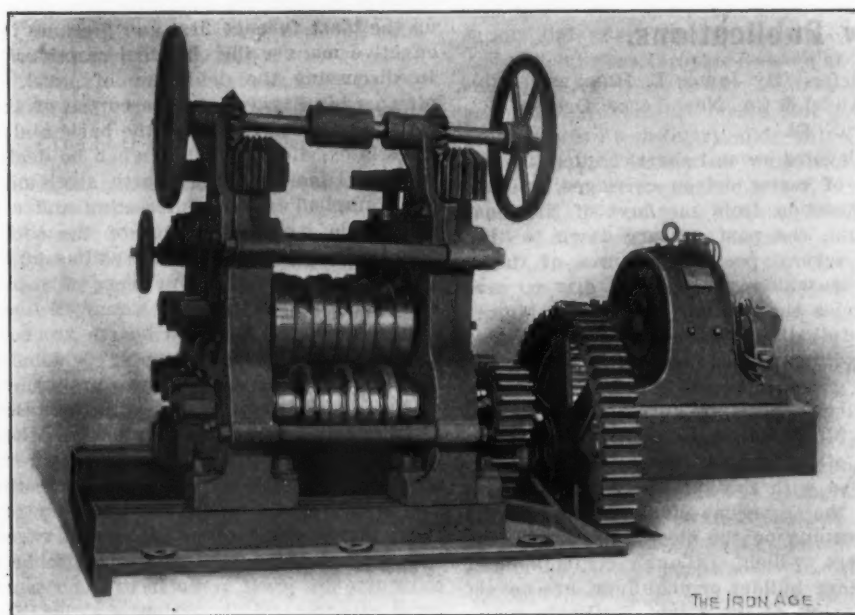
The accompanying engravings show several types of angle straightening machines built by the United Engineering & Foundry Company of Pittsburgh. In the first engraving the machine is arranged with independent top screws for adjusting each top roll separately. The second engraving is of the smallest machine built. It is so constructed that the adjustment of the top rolls can be controlled by one hand wheel. It is motor driven. In the last engraving the machine has a belt

is used the motor pinion and gear have cut teeth. The rolls are easily removed for replacement or returning by sliding one housing along on the bed plates, which are made long for this purpose. These machines are suitable for straightening irregular shapes, such as U-bars, Z-bars, rails, channels and I-beams. Various sizes and patterns have been built for several of the large iron and steel concerns throughout the country.

The Engineers' Society of Western Pennsylvania met in Pittsburgh last week and organized a structural sec-



*Each Roll Adjusted Separately.*



*Fig. 2.—Motor Driven Machine with Top Rolls Controlled by One Hand Wheel.*

### NEW ANGLE STRAIGHTENING MACHINES.

drive and the top rolls are adjusted by three hand wheels, giving a separate adjustment for each roll. The first machine can also be arranged with a motor drive and with the top roll adjustment controlled by one hand wheel. Taken together these machines will straighten the series of angles up to 8 x 8 x 1 inch, or the heaviest section of angle rolled at the present time. They are built for either belt, direct connected engine or motor drive and are all of the seven-roll type, furnished with either sand, chilled or cast steel rolls. The gears are all made of cast steel, and when a motor drive

tion. This is composed of engineers interested in bridge building and structural work. This gives the society three sections, the mechanical and chemical sections having been in existence for some years. The new section organized with James K. Lyons as temporary chairman and Willis Whitehead temporary secretary. L. F. W. Hildner, C. Worthington and L. S. Affelder were appointed a committee to draft by-laws, and W. G. Wilkins, E. K. Morse and G. T. Barnsley were made a Committee on Nominations. Both committees will report on March 10, and the organization will be made permanent.



Regular meetings will be held on the fourth Tuesday of each month. Special papers will be submitted on subjects pertaining to steel structural and foundation work and other matters of interest to the section.

### Pacific Coast News.

SAN FRANCISCO, February 19, 1903.—After a long spell of rain the weather has cleared up, and the crop situation could hardly be better. The financial outlook is as good as ever, and trade generally, though comparatively quiet, is much more active than it was a year ago. There is great activity in the various fields of industry, and the demand for machinery, hardware and supplies of various kinds keeps on increasing at a great rate. Within a couple of months the redwood mills of the counties north of San Francisco Bay will be in full blast, as will also the sugar pine and white pine mills of the interior valleys and the Sierras; while improvements are being steadily made in the oil fields and in the mines. The building trade is incessant in its activity, and the number of buildings requiring structural steel

ten, which, on the whole, will be in favor of the jobbers of the coast. So this struggle which has been going on for years has terminated in favor of our Pacific Coast trade. It has cost our merchants a great deal of money and a great deal of worry, but all their sacrifices are now more than repaid.

The factor of water competition in transportation is becoming of greater importance daily, and New York, by steam, has now been brought within 55 days of San Francisco. When the Panama Canal is constructed the time will be reduced to 25 days, or practically railroad freight time. This will take away a great deal of railroad business, unless freights from the Atlantic Coast are reduced to a much lower figure than now prevails.

The establishment of Geo. H. Tay & Co., dealers in plumbing material and sheet metal goods, 49 to 53 First street, was damaged by fire the other day to the extent of \$7000.

J. O. L.

### The Amalgamated Association.

The suggestions sent to the officers of the Amalgamated Association of Iron, Steel and Tin Workers are

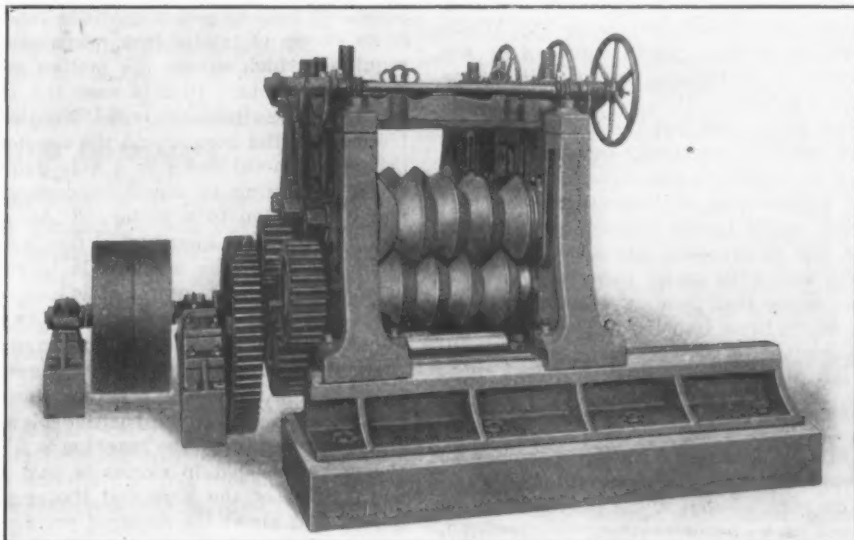


Fig. 3.—Belt Driven Machine.

### NEW ANGLE STRAIGHTENING MACHINES.

is constantly being increased. Outside of general hardware and machinery, most of the supplies are being obtained, and will have to be obtained, from abroad. Such is especially the case with pig iron, merchant iron and structural steel. Among recent arrivals are 1010 tons of pig iron by the "Seafarer" from Newcastle-on-Tyne, 750 tons by the "Dunreggan" from Liverpool, 7859 packages of charcoal iron from Antwerp by the "William Mitchell," 6800 tons of rails by the "Como" from Antwerp, 4200 tons of steel rails by the "Dora Baltea" from the same port; 26,648 packages of merchant iron, 1477 packages of steel, 4205 steel rails, 3711 bundles of charcoal iron, &c., by the "Balmoral" from this port also.

Our hardwaremen and representatives of general trade have made a most successful visit to Chicago, where they met representatives of the Middle West and the Interstate Commerce Commissioners. The result is that the Southern Pacific and Santa Fé have made changes on 225 different kinds of hardware from St. Louis to the coast. There are now five classes of freights—namely, \$1.25, \$1.50, \$1.60, \$1.75 and \$3. The new rates and the new classifications are equivalent to a reduction. The rates on iron and steel shipments have also been changed. The compromise on the struggle of the St. Louis jobbers, the railroads and the Pacific Coast jobbers makes the difference between carload and less than carload rates 50 cents per 100 pounds, or \$10 per

being compiled by Secretary Williams, and will be sent to the lodges in a few days for their consideration. The changes proposed will be discussed and the delegates instructed how to vote on them. The East Youngstown Lodge has voted in favor of increased pay for the heaters. Under the present scale the roller pays the heater one-fourth of his wages, and a 5 per cent. increase is suggested. The same lodge also recommends the discontinuance of the *Amalgamated Journal*. The candidacy of Lewis Good for president of the association was indorsed by a number of lodges. The convention, which will meet in Columbus, Ohio, April 14, will be in session three weeks. The principal interest will center in the wage scale and the election for president. Tin plate and sheet workers affiliated with the Amalgamated Association will introduce a resolution at the coming convention of this organization, which will throw open all of the nonunion mills of both the American Tin Plate and American Sheet Steel Company to members of the association. Inasmuch as no member of that organization can be employed in a nonunion plant at the present time they are compelled to depend entirely upon the union mills of these two companies for employment. As these mills have not operated more than six months during the past year they argue that it would be better to throw open all the mills so that the members of the organization can get employment in other mills when their own plant is shut down.

## Rotary Pressure Blowers.\*

BY GEORGE C. HICKS, JR., CONNERSVILLE, IND.

Your association has kindly tendered us the opportunity of presenting to you a paper on the subject of positive pressure blowers. It will therefore be not amiss, as the P. H. & F. M. Roots Company were the pioneers in this type of machine, to give a short historical sketch of the conception and development.

### The Invention of the Rotary Blower.

In 1859 P. H. and F. M. Roots were engaged in the woolen business in Connerville, Ind. Their mill was on the banks of a water power canal and they determined to build a water motor to furnish their power. Their first idea was in principle the rotary blower of to-day. It was made of wood throughout, except the wrought iron shafts and cast gears. The pistons, or impellers, were of wood, built up on wrought iron forms, fixed on the shafts, and were planed to the proper curves. The case was built up in segments, held in place by the wooden heads. This first machine was placed in operation and run a short time, when the water caused the impellers to swell and effectually checked any further rotation. Taking the machine to the shop the swelling was reduced and the machine belted to a line shaft for further test as to fit. While running in this manner a foundryman standing by noticed a strong current of air coming from the discharge side and remarked, "I believe that machine will melt iron." That remark, gentlemen, put the bee in the bonnet, and the Roots brothers practically devoted the rest of their lives to its development and manufacture.

The trials and tribulations of introducing the machine on the market would hardly interest you, though I have no doubt a few of the older members here present shared in them and gave many valuable hints for overcoming them. Since that time several forms have been tried, one in which three impellers have been used; but, after being submitted to the test of practical work, the survival of the fittest is represented in the two-impeller machine, a close copy of the original conception.

To those who are not familiar with the machines as built to-day I would say that they consist of two impellers, mounted on parallel shafts, the curves of these impellers so formed as to be in constant contact with each other, as the two shafts revolve at a uniform speed. The capacity of the machine is four times the space between the case circle contacts of the impeller curves, for both sides of each impeller are presented to the discharge chamber at each revolution. These impellers are not run in actual contact, a clearance of 1-64 to 1-100 inch being left over the entire rolling surface, which clearance is afterward taken up by the use of a metallic grease evenly coated over the surface of the impeller. You will thus see that the slip of air must be small, and consequently the volumetric efficiency high, in this type of machine; in fact, it is seldom, under ordinary foundry pressure, that the slip of air exceeds 10 per cent., and in many cases it is as low as 6 per cent.

### Line of Separation Between Centrifugal and Rotary Blowers.

The friction of the machines is nearly a constant quantity under varying pressures, and this point leads us to the question as to where the field for the centrifugal blower ceases and that of the rotary begins. You will see that, the friction being nearly constant, at low pressures the friction would be a large percentage of the total loss of work; but as the pressure increases this percentage of work lost becomes a less and less proportion of the total work done. I want to be fair to our friends of the pan, though they may not agree with me, and we shall probably always have a bone of contention over the dividing line of our respective fields, especially as grief jobs and poor engineering often give a false idea of the actual value of the respective types. We have found from tests, but mostly from practical

operation in the foundries, that the line of separation lies between 7 and 9 ounces of blast pressure. Between these limits the engineering and local conditions of space and power must determine which is the better machine to use. Judging from the demand and pressure given by our correspondents, I should say that the tendency in foundry practice is toward higher pressures, as that means quicker melting, and, consequently, larger output. You, gentlemen, are better judges than I of what pressure is best suited to your coke, your iron and your general conditions, but it is a well established fact that heavy blast means a high degree of heat, and consequently more active chemical reaction to get rid of the impurities that pass off, either as gas or in the slag, and I believe that a cubic foot of air at 12 to 16 ounces pressure gives a better efficiency in combustion and reduction than the same amount at a lower pressure.

### Special Features of the Positive Blower.

The points of merit in the positive blower are briefly these: 1. A vibrating blast which will build up as occasion requires and tend from its character to keep the downward movement of the contents of the cupola continuous, also to run up the pressure high enough to break up any construction in the cupola. These obstructions may be either a bridge forming in the cupola or an excess of melted iron, when some large casting is required, which causes the molten metal to rise above the tuyere irons. In this case the tuyeres offer more resistance, the pressure rises, keeping the metal from freezing on the nozzle, and the nozzles open until a tap brings the metal down to a safe point. 2. A moderate speed, admitting of direct connection to an engine or single reduction to a motor. 3. An absolute surety of getting a definite quantity of free air per revolution at whatever speed the machine is to run, whether faster or slower, without appreciable loss of economy. This great flexibility of the positive blower allows it to fill almost any condition of piping arrangement. In many cases the source of power is at some distance from the foundry, and the loss in pressure, due to pipe friction, is considerable. With the positive blower the amount of free air taken in by the machine is a constant quantity; the power needed in excess is just sufficient to offset the friction of the pipe and the cupola gets the same quantity of air at the required pressure. Again, through a misunderstanding of conditions, too small an amount of air or too low a pressure may have been calculated upon. A simple speeding up of the machine will overcome either of these conditions without loss of economy.

It is best to sell the user a machine having some margin, as nearly all foundrymen push their cupolas before putting in new or larger ones, and 10 to 20 per cent. excess in capacity is a very convenient thing to have around.

### The Power Required.

In regard to power, we have found that the positive foundry blower at 16 ounces pressure has a normal loss of about 10 per cent. in slip of the air, 8 to 10 per cent. machine friction and about the same for the source of power, whether an engine or single geared motor. A belted rig means 2 to 5 per cent. additional loss, according to the condition and application of the belt. These losses make a total loss of 23 to 25 per cent.; in other words, the total efficiency of the blowing installation is 73 to 75 per cent. These figures have been proved again and again, and I feel perfectly safe in giving them to you. Thus we find that a 37 cubic foot machine, melting 12 to 12½ tons an hour, requires on a 70 per cent. basis of total efficiency 37 horse-power. Actual results show all the way from 32 to 36 horse-power, according to the mechanical condition of the plant. Personally I am a believer in ample power allowances and would recommend a 40 horse-power engine or motor, so as to be ready to meet and overcome contingencies that may arise.

Positive blowers have been severely tested by smelting works, where the average pressure is about 3 pounds, and under these conditions 90 and 93 per cent. volumetric efficiencies are obtained.

\* Paper read before the Pittsburgh Foundrymen's Association, Pittsburgh, March 2, 1903.



**Interesting Points.**

It might entertain some and bore others to discuss the merits of the different curves used on the impellers of positive blowers, but suffice it to say that different uses require different curves, and that the utility of any particular curve lies not in that curve but in the workmanship in the shop. A slight difference in curvature for some mechanical convenience makes little or no difference to the foundryman; a slight difference in workmanship makes all the difference in the world in the operation.

A word as to the proportioning of blower capacity to your cupola. Don't cut your cloth too close, for then it may rip at the seams. Was there ever a foundryman who did not want to get from 10 to 25 per cent. more than the rated capacity out of his cupola? Long life means a life of uniform conditions within one's limits. Every excess of those limits means a strain and permanent damage to the system. So with machines; make it easy for them and they will make it easy for you.

If you have a pipe to run remember that the shortest distance between two points is a straight line. Make it easy for your air and you won't have joints slipping out. A direct connected engine, running on the throttle or adjustable cut off, and a variable speed motor are, in my opinion, two ideal methods of handling air for cupola work, for either rig requires a minimum of attention and repairs, coupled with great flexibility.

## Vast Improvements by the National Tube Company.

At Pittsburgh last week, W. B. Schiller, president of the National Tube Company, made official announcement of large improvements and building of new works by that company. The principal new plants will be built at Lorain, Ohio. It will be recalled that plans for the building of extensive works had been made by the Carnegie Steel Company before that company were taken over by the United States Steel Corporation, and by the building of large new works at Lorain the National Tube Company are largely carrying out these projects. The improvements include the remodeling of the Pennsylvania Works in Pittsburgh, the remodeling of the Riverside Works at Benwood, W. Va., and the erection of a large tube plant at Lorain, Ohio. The new works at Lorain will call for the expenditure of over \$8,000,000, and will mean the employment of 5000 additional workmen at that place. Lorain was chosen for the new plant on account of the economical handling of the raw material and the getting away from railroad congestion, which has been tying up the industries in the Pittsburgh district. The United States Steel Corporation, of which the National Tube Company are a subsidiary interest, already have a large steel plant at Lorain engaged in the manufacture of steel girder rails, and are now making from 1200 to 1400 tons more steel per day than is used in the manufacture of rails. This extra steel has heretofore been worked up into billets and sold in the open market. It is the intention, with the erection of the new plant, to use this extra tonnage in the manufacture of tubes. The plant at Sharon, which has never been fully completed, is to be abandoned and the machinery will be removed to the new plant at Lorain. The company already own large ore docks at Lorain, and these are to be enlarged to take care of the new business which will be brought there. All the ore and other raw materials used in the making of tubes, with the exception of coke, can be taken to Lorain by water, thus avoiding the excessive freight rates and the delays incident to the shortage of cars and motive power, and a large part of the finished product can be distributed by the same route. The company have been looking to the cutting down of operating expenses, and this economy in the handling of the raw material was in favor of Lorain.

W. B. Schiller, president of the National Tube Company, announced that the improvements at Lorain would include the erection of two blast furnaces, with daily capacity of 600 tons each; the erection of a rolling mill,

with a capacity of 1200 tons of skelp a day, and the erection of pipe and tube mills for the making of all sizes of pipe and tubes, with a daily capacity of 1000 tons. The entire process of manufacture, from raw ore to finished tube, will be possible at the new plant. The company already own 1000 acres of land in Lorain, so that they will not have to purchase any ground for the erection of buildings. The rolling mill to be erected will have five trains of rolls. They will consist of a 14-inch continuous mill, a 28-inch reversing mill, a 30-inch universal and a 90-inch plate mill. The pipe mills will consist of six butt welding and five lap welding furnaces. All the machinery at the new plant is to be of the latest labor saving type, so that the products can be handled with the least amount of manual labor. Electricity will play an important part in the operation of all the machinery, and the entire plant is to be of the most up to date pattern.

In addition to the new plant, two other plants are to be overhauled and put in modern shape. The most extensive of the repairs are to be made at the Riverside plant in Benwood, W. Va., and contemplate the complete remodeling of the steel plant, with a view of increasing its capacity, modern equipment in the five skelp mills and minor changes and alterations in the tube works, with the view of reducing the cost of production. The blast furnaces will be entirely rebuilt; a double skip hoist will replace the present vertical tower. A new Allis blowing engine, which has already been delivered, will be installed and will be going soon.

For the Pittsburgh district the only improvement that the company are ready to announce at the present time is the remodeling of the Pennsylvania Works. The improvements there consist of the enlargement and complete remodeling of the plant. Much of the machinery in use there is of an antiquated pattern, and this is to be displaced and new machinery operated by electricity is to be installed. It is the intention to bring the Pennsylvania Works plant up to a higher standard of efficiency by making it modern in every respect. The company have appropriated \$150,000 for this purpose.

The improvements planned, with the exception of the Lorain plant, are not for increasing the output of the company, but for the cheapening of operating expenses. Mr. Schiller figured that the output would be increased about 1400 tons a day, the greater part of this coming from the new Lorain plant. With the improvements of the other plants there will be a natural increase of output, but only what would come from the use of the modern machinery and methods to be employed in the business. No announcement of the plans in contemplation for the improvements at McKeesport was made, except that McKeesport will not get the Sharon plant.

**The Production of Spelter.**—Henry R. Merton & Co., Limited, metal merchants of London, have just issued the following statement of the production of spelter:

*The World's Production of Spelter—Gross Tons.*

	1902.	1901.	1900.
Belgium, Rhine and Holland..	200,140	199,285	196,470
Silesia .....	115,280	106,385	100,705
Great Britain.....	39,610	30,055	29,830
France and Spain.....	27,030	27,265	30,620
Austria and Italy.....	8,460	7,700	6,975
Poland .....	8,150	5,935	5,875
Totals .....	398,670	376,625	360,475
United States of America.....	138,090	122,830	110,465
Totals .....	536,760	499,455	470,940

The statistics for the United States were compiled by the American Metal Company, Limited, of New York, who give the distribution, geographically, as follows:

*Production of Spelter in the United States—Gross Tons.*

	1902.	1901.	1900.
Eastern and Southern States.	9,532	6,870	7,375
Illinois .....	39,823	37,655	31,575
Indiana .....	1,480	2,025	2,530
Kansas .....	79,484	68,170	55,815
Missouri .....	7,771	8,110	13,170
Totals .....	138,090	122,830	110,465

It will be observed that the principal increase has taken place in Kansas.

### Improvement of Brooklyn Navy Yard.

WASHINGTON, D. C., March 3, 1903.—A special board of naval officers has prepared a plan for the improvement of the Brooklyn Navy Yard in accordance with a resolution recently adopted by the Senate, and although the present Congress will adjourn without action thereon, there is no doubt that the project will be authorized to be executed early next winter. The improvements are designed to develop the water front at the navy yard in order that a larger number of vessels may be simultaneously built or repaired, and the total estimated cost of the project is \$1,500,000.

The present water front of the navy yard has a length available for berthing five large vessels, and the space up to the beginning of the causeway is the only part which is conveniently accessible to the repair shops and stores of the yard. The building of the "Connecticut," which has been ordered by Congress to be constructed in a Government yard, will withdraw a berth for one large vessel, and when the construction of dry dock No. 4, already authorized, shall begin, another berth for a large vessel will be withdrawn from use. The board states that it is manifest that the berthing space in this part of the yard is the most valuable, and its enlargement more necessary than at any other part for the fitting out and repairing of vessels.

The south side of the Cob Dock has berths for two large vessels; Whitney Basin for five large vessels; the northwest part of Cob Dock, including the new coal pier, for four large vessels. No part of this berthing is conveniently situated for repairs of vessels, and the cost of such repairs is estimated at from 15 to 25 per cent. more than if the vessels were berthed at the navy yard side. The removal of a part of Cob Dock would take away the berthing space for four large vessels, but would permit the building of piers and the extension of the sea wall, giving berths for 12 large vessels instead of the existing five. In the opinion of the board the removal of part of the Cob Dock and the building of the piers referred to are essential features of the improvement for ships fitting out and needing repairs and requiring berthing near the shops and storehouses. It is also recommended that the yard adjacent to the great storehouses and the wharf, which is the principal point of heavy receipts and shipments, should be enlarged by the purchase or condemnation of the adjacent district in Brooklyn, bounded by Hudson avenue to the present angle of the navy yard wall, northwest boundary. The purchase recommended, however, is not essential to the improvement in the water front required for the berthing of battle ships, but has particular regard to the shipping facilities of the yard. It is a matter of urgent importance, in the opinion of the board, as this wharf is the chief shipping point for the entire navy.

The adoption of the plan proposed will require the rebuilding elsewhere of the buildings now on Cob Dock necessary for the use of recruits of the navy, of which a large number receive their initial training in connection with the receiving ships at this station. The office building, it is said, can be moved, but the other three buildings are old and unsuitable, and could not be moved but should be torn down with the Cob Dock. The following detailed estimates are submitted in this connection:

Cost of removal of Cob Dock, as indicated, to 30 feet below mean low water.....	\$260,000
Increasing depth of the part in front of Cob Dock and in Whitney Basin to a uniform depth of 30 feet below mean low water.....	110,000
Construction of five piers, according to kind of structure adopted, \$250,000 to \$750,000; mean suggested.....	500,000
Constructing 1,180 lineal feet of wall.....	118,000
Completing pier No. 1.....	35,000
Electric lighting piers.....	15,000
Railroad track, 5,900 lineal feet.....	21,000
Heavy crane track, 1,000 lineal feet to piers.....	20,000
Alterations of water system, including 6,700 lineal feet of water pipe.....	17,000
New buildings to replace old ones now on Cob Dock.....	70,000
Construction of three piers.....	300,000

In addition to the above figures an appropriation would be necessary to acquire the land referred to to provide additional shipping facilities. W. L. C.

The protest of C. W. Leavitt & Company of New York against the decision of the Collector of New York

making the rate of duty on pewter in pigs 45 per cent. ad valorem has been overruled by the Board of General Appraisers. The decision of the Collector has been approved.

### Records of Tests of Hendey-Norton Lathes.

Every one of the Hendey-Norton lathes, built by the Hendey Machine Company of Torrington, Conn., is subjected to the most thorough and careful test before being considered ready for shipment. While every individual part of the lathe is examined closely, the most attention is naturally devoted to those parts which have

## MEMORANDA OF TESTS.

### HENDEY-NORTON LATHE.

Operation and Final Inspection for Engine Lathe No. 3372

Size 14 x 6 ft

Having as ordered Taper Attachment.....  
 " " Compound Rest..... X  
 " " Plain Rest..... X  
 " " Homan Rest.....  
 " " Quick Elevating Rest.....  
 " " Full Swing Rest.....  
 " Double Carriage or Rise and Fall Rest.....  
 " Relieving Attachment.....  
 " Automatic Turret.....  
 " Carriage Turret.....  
 " Drawing-in Attachment.....  
 " Watch Tool Chucks.....  
 " Oil Pan.....

Other Chucks, if any, size and name.....

Other features, if any.....

1 Chuck saw plan

Front Page.

### RECORDS OF TESTS OF HENDEY-NORTON LATHES.

to do with the accuracy of its working. It would seem, at first glance, as if the manufacturers had set their standard of accuracy too high and had introduced an element of extreme and unnecessary refinement. So rigid are their requirements that it is doubtful if there is one shop in 50 into which these lathes go where it would be possible to test them as closely; the needed instruments and experience would both be lacking. But the company endeavor, and succeed in the attempt, to produce a tool capable of doing the finest work.

It goes without saying that the men making the examination are mechanics of wide experience. In a certain way they are independent of the rest of the shop—that is, they are paid for testing the lathe and are responsible to the office alone. They are expected to make the most careful inspection and to note any error in excess of the limit, no matter who may have made the mistake. If any fault should be found afterward the inspector through whose hands the lathe passed would be held strictly accountable; but it rarely if ever happens that a machine having any imperfection manages to slip by. The inspector further knows that a serious

oversight on his part would probably mean the loss of his job.

A complete record of the test is kept upon a stout manila paper folder, the three divisions of which are here reproduced about half size. The first or front page gives the number and description of the lathe and mentions any special features required by the order. The second, or first inside page, gives the result of a general inspection made preparatory to the actual test. In this the several parts of the lathe are tried to see if they work freely and smoothly. Tests for accuracy and true running are made in thousandths of an inch, with a Bath indicator, and with the lathe belted and in actual operation. These are recorded on the third page.

These records are not intended solely for the information of the office. They are all made in duplicate, one copy being placed on file and the other being sent to the purchaser. In this way the user of the lathe is informed of its exact condition and the actual degree of

horse-power needed in the western municipalities outside of Toronto and Hamilton. In reply Premier Ross said, in part:

"We cannot hold out any hope for you that the Government will undertake the generating and transmitting of power for the benefit of the western municipalities of the province, for that would practically involve a similar favor being granted to other municipalities wherever they might be given authority. The next question is as to whether we are prepared to take the responsibility to vest municipalities with power to help ourselves. This we have decided to do in two forms.

"First, as to Toronto, I might state that Toronto was the first municipality to submit a proposition to the House in regard to the generating of power. The bill submitted by Toronto was rejected, but I feel confident that had it been submitted in the form in which you presented your case to-day it would have gone through. If Toronto wants to go into the enterprise

Tests made in thousandths of an inch, with Bath Indicator,  
with lathe belted and in actual operation.

GENERAL INSPECTION MADE PREPARATORY TO TESTS.

Lathe properly leveled	X
Carriage moves freely and smoothly the entire length of the bed	X
Cross slide moves freely and smoothly	X
Compound rest the same	X
Rise and fall rest operates properly	X
Both lateral and cross feed frictions clamp and unclamp properly	X
Both feeds drive a strong cut	X
Clamp for carriage holds the same firmly	X
Carriage has a good bearing on ways of bed	X
Automatic stop operates properly	X
Head spindle cone and back gears run smoothly and freely	X
All oil holes and oil devices are in good condition	X
Tail spindle runs out and in smoothly and properly	X
Tail block clamps and unclamps properly and moves freely up and down the bed	X
Set over screws work properly	X
The gears at end of lathe are adjusted and interchange freely	X
Gears in gear box with operating handle work properly	X
Index attached in place	X
The half nuts operate properly and are a good fit on lead screw	X
Lead screw runs true and free without back lash or end motion at thrust	X
Vibratory test of spindle made	1/4

Second Page.

Lathe Spindle tests made with bar 12" long fitting firmly in taper of lathe spindle; bar having three equidistant collars or turning points of machine steel from which all measurements are taken.

Alignment in 12" .....	Up	Straight	Down
Turns in 12" with sharp tool and light chip on test bar in spindle. Measurements at outer end compared with head end .....	Large	Exact	Small
Spindle found to turn round, with no deflection shown on indicator .....		X	
Variation in alignment of taper hole in spindle shown by bar turned half way around in hole .....	Head	Center	End
Spindle and face plate align with cross slide, tested by actual turning and facing of large face plate. When finished the plate is .....	Convex	Straight	Concave
Taper hole in spindle runs .....	Out	True	
" " " bushing " .....		1/2	
End motion in spindle " .....		1/2	
Tail spindle points when out full length .....	In	Straight Horizontally	X
	Out	Up	1/2
		Straight Vertically	
	Down		
Tail spindle aligns with head spindle in three positions on bed .....	Up	1/2	1/2 1/4
	Exact		
	Down		
Taper attachment bar aligns with ways of bed when at O			
Date of inspection	Jan 26, 1903		
Inspected by	L. H. Ross		
Endorsed by	L. H. Ross		
	Shop Inspector		
	Chief Inspector		

Third Page.

RECORDS OF TESTS OF HENDEY-NORTON LATHES.

error in the operation of every part. The entries in the card we reproduce were copied from the real test of lathe No. 5572.

Niagara Power for Canadian Cities.

NIAGARA FALLS, N. Y., March 2, 1903.—It has been decided that at the coming session of the Legislature of the Province of Ontario a measure will be introduced giving Toronto and other municipalities in Ontario the right to develop and transmit power from Niagara Falls. To facilitate this the Government has agreed to appoint a commission under control of the municipalities. These facts are the result of a meeting between the Ministers of Ontario and a deputation representing the various municipalities. In addition to Premier Ross, the Ministers present were J. R. Stratton, John Dryden and F. R. Latchford. The case of the municipalities was presented by William Snider of Waterloo, who, among other things, pointed out there was from 20,000 to 25,000

we will give it the power; of course, reserving the right of the municipalities to such power as Toronto will not use. The expense involved should be subject to the will of the ratepayers; that is the fundamental principle of municipal law.

"Second, if Toronto wishes to enter into a combination with other municipalities, or other municipalities want to be independent of Toronto, provision should be made for this stating what it is proposed to do, and a bill to that end will be ready soon after the House meets. Every opportunity will be offered the municipalities to assist in perfecting the bill."

Premier Ross also informed the deputation that he had asked the chairman of the Victoria Park Commission to prepare a report as to the extent of the power available; also stating he had been informed that the municipalities will not for a quarter of a century utilize the full power that has already been given out to private corporations.



## Lake Iron Ore Matters.

DULUTH, MINN., March 1, 1903.—The new base price on lake ores, as it is fixed, will make the value of ores from this region, in the quantity that now seems probable for next season's output, about \$110,000,000, delivered at Lake Erie docks. This is not the whole estimated output by mine schedules, as these are undoubtedly high by several million tons, but is what is now liable to be moved. Though the lake rate on this ore is not yet fixed it is pretty well settled in the minds of shippers as to what they will pay, and the amount of money to be received by vesselmen for the year's ore business will be in the neighborhood of \$24,000,000. This is figuring on the proportion from the various ports and at the rates that are now supposed likely. Of course, any such ante-season estimates are mere conjectures, but they do serve the purpose of fixing in the mind what a vast thing this all is and what it means to the nation's internal commerce. It looks now like an increase of about 10 per cent. in the amount of ore to be mined and delivered this year.

### Jones & Laughlins' Ore Interests.

Interest just now centers in the ore holdings of Jones & Laughlins, Limited, and of W. P. Snyder and associates, the latter including Shenango Mining Company, the Clairton Steel Company, W. P. Snyder & Co. and the Standard Mining Company. It has been felt at the lake for some time that the Snyder-Oliver ores would go to the Steel Corporation in due course. Jones & Laughlins' ores on the Mesaba range are all in the Lincoln and Grant mines and in a 40-acre tract in the town of Virginia, now idle. The former is an underground property of good Bessemer ore and is developed by two shafts. It is a large deposit and is held in fee. The Grant is a State lease of fairly good ore, containing more than 10,000,000 tons, and is being developed to ship quite largely this year. On the Marquette range the company have the Pittsburgh and Lake Angeline mine, adjoining the Lake Superior and Cleveland Cliffs lake shafts. It is a mine long famous for the quality of its ores and it is still a large property, but the high grade ores that were once so plenty are not in the majority. They also have the Monongahela, in the Crystal Falls district, now idle.

### The Snyder Ore Interests.

The Snyder interests, so called here, control with their various companies and in concerns in which they have stock interests probably more than 100,000,000 tons of ore, some of it the very finest to be found on the Mesaba range. These interests are in various concerns having varied stockholders, and it is generally understood that a sale by some of the stock owning interests has recently taken place. The Shenango mine, in section 23, T 58, R 20, is a large and fine property, but the ore holdings of the Monroe and Chemung iron companies, in which Messrs. Snyder, Oliver, Congdon and Tener have interests, are much larger. The Clairton Steel Company have two large properties, one in section 22, T 58, R 20, and the other in section 24, T 57, R 22, while the Standard Mining Company have an option on what may prove to be a valuable property in section 13, T 56, R 24. These various holdings have generally been regarded as the largest independent ore group on the Mesaba range outside the Hill tonnages. That they would ultimately go to the United States Steel Corporation has been regarded as the probable thing.

These deals, if closed, will leave Corrigan, McKinney & Co. the largest holders of lake tonnage, both Bessemer and non-Bessemer, outside the big furnace interests, and make them to a certain extent a key to the situation. Their Mesaba range holdings include the big Stevenson, which is not, however, as large in tonnage as its shipments would indicate; the Commodore, which has been closed for several years on account of an attempt to force a reduction of royalties, but which is now being unwatered and reopened; the Jordan, of small tonnage but easily mined; the Laura and Winnifred, also of small tonnage; and two unopened properties in T 57, R 22, both of which are to be developed the present year.

In addition to these mines they are now operating 12 drills at various points on the Mesaba range, in hopes of finding other deposits. In the Crystal Falls district they have a very large non-Bessemer production, owning the Crystal Falls, Lincoln, Lamont, Great Western, Dunn, Armenia, Tobin and some others of more or less importance. The Crystal Falls and Great Western are large producers and the Armenia and Tobin are being developed to be even more important mines in all probability. While mines were secured at small prices in the years of depression, they have been reopened and improved at great cost and represent a very tidy investment.

### The Swanzy District.

Much interest is being manifested in the Swanzy district, where ore of Bessemer quality has recently been discovered. The Princeton, formerly the Swanzy, is the only property working there, but it has been developed into quite a mine in the past year or two, and will make a considerable shipment this year for its owners, Tod, Stambaugh & Co. Recently the remaining lands of the Escanaba River Land Company have been optioned to the Cleveland Cliffs Iron Company and they are at work. The option is for a royalty of 20 cents and ample time for preparatory work. Diamond borings in the river valley there have recently shown ore of a thickness of 70 feet across the dip. Assays have shown this ore to run up to 62 iron and down to 0.028 phosphorus, a very fine grade. The range has been proved for a length of several miles. A shaft will be sunk by the Cleveland Cliffs Company at once. Swanzy is on what is known as the Cheshire range, an offshoot of the Marquette.

At the Mansfield mine, Crystal Falls, the Oliver Iron Mining Company have been at work on a shaft to reach 1000 feet depth. They have reached the sixth level and will now sink as well as raise from the bottom, where they will have a cross cut to underneath the shaft. At the north end of the mine developments continue pleasant and the indications are that the property will continue to improve as exploration increases. At the old West Ludington, at Iron Mountain, the Oliver Company have a shaft down 580 feet and they are cross cutting in hope of getting the ore. Some low grades have been found above.

On the Vermillion range the new deep shaft of Savoy mine, which is surmounted with a steel shaft house 165 feet high, is in commission and is hoisting some ore. It is not yet in full running order. A steel shaft house of even larger size will surmount the steel lined shaft now being completed in Pioneer mine, and this shaft will probably go into commission in the course of the coming year. At Zenith they are sinking a new deep shaft which will be modern in all its appointments and will be properly housed in keeping with the greatness of the ore deposit and the surrounding properties. These great steel structures are the most imposing mining buildings on any range and are notable in many ways.

D. E. W.

**The Freight Embargo.**—The annual report of A. J. Cassatt, president of the Pennsylvania Railroad Company, contains the following passage which is interesting as throwing light on the freight embargo: "The remarkable development of business throughout the country, and particularly in the sections served by your lines, created during the past year a demand for transportation which could not be supplied. For although the traffic carried over the roads composing your system east and west of Pittsburgh aggregated nearly 270,000,000 tons, being an increase of 26,000,000 tons, or more than 10 per cent. over the previous year, the necessities of the industries dependent upon your lines demanded a much larger movement. The inability to accommodate these industries was due mainly to lack of track and yard facilities. There were cars and locomotives enough to have moved a much larger traffic and possibly to have provided the transportation required if the movement had been free, but owing to the overcrowding of the

running tracks and yards it was impossible to use the equipment to its full capacity. It has been the policy of your management for years past to continuously increase these facilities so as to keep them up to the demands of the traffic; but although heavier expenditures have been made for this purpose since the beginning of the present period of business activity than ever before in the same time the exceptional growth of the tonnage has outstripped the facilities that it was practicable to create."

### The Eight-Hour Bill Dead.

WASHINGTON, D. C., March 3, 1903.—The Eight Hour bill has been killed in the closing days of this Congress, which will adjourn at noon to-morrow. Its death has been brought about by the vigorous and well directed work of the manufacturing interests throughout the country under circumstances that promise well for future contests over this and similar measures.

Senator McComas, chairman of the Committee on Education and Labor, who has charge of the Eight Hour bill, has made several efforts within the past fortnight to bring it before the Senate, but on each occasion his request for consideration has been denied under circumstances that made it quite clear that the Senatorial Steering Committee was fully advised as to the obnoxious character of this measure and was not disposed to bring it to a vote. Soon after the holiday recess Senator McComas gave notice that he would call the bill up at an early date, but when several weeks later he attempted to do so he found the so-called Statehood bill, which was then the "unfinished business," blocking his pathway. He had effected a combination with Senator Daniel, a member of the Committee on Education and Labor, whose assistance was counted upon to bring the minority members of the Senate into line for the bill, and both Senator McComas and Senator Daniel appealed to Senator Quay, in charge of the Statehood bill, to permit the Eight-Hour bill to be taken up for consideration. Senator Quay, however, declined to yield, and in a statement tinged with sarcasm said that, much as "he sympathized with the objects sought to be attained by the so-called Eight-Hour bill," he could not consent to lay aside the pending bill. On a subsequent occasion Senator McComas gave notice that he would again call the bill up two days later, but when the time he had fixed was reached the Senate was found to be in executive session.

It is no secret here that the Statehood bill has been cleverly managed by the Steering Committee as a buffer to prevent the enactment of undesirable measures and especially to bring about the death of the Eight-Hour bill. It is perhaps to be regretted that the bill was not beaten on a direct vote, but there is the highest authority for the statement that more than a majority of the Senate have urged the Steering Committee not to permit the bill to reach a ballot, and thus its death is fully approved by more than a majority. It is an open question, indeed, if the bill could have been brought to a vote even had it been given consideration. Half a dozen Senators were prepared to make exhaustive arguments against it, and it is certain that much more time would have been consumed in speeches upon the measure than could have been assigned to its consideration with any proper regard for the necessary legislation of the session.

### The Work of the National Association of Manufacturers.

Great credit is due the National Association of Manufacturers for the defeat of this measure. Until within the past year the fight against this bill had been carried on by the leading shipyards and armor plate makers unaided. Congress after Congress the bill was beaten by the energetic work of these individual interests, but the bill was brought into the Senate at so early a period in the present Congress that it began to seem doubtful whether it could again be defeated. At this crisis the National Association of Manufacturers entered the field and opened up a campaign of the most vigorous character. The entire membership of the association, which now embraces 2000 of the leading manufacturers of the

country in all lines of industry, took an active part in the work. Strong representations were made by members of the association who appeared before the Senate Committee and these were followed by carefully prepared legal arguments, statements concerning the technical industrial questions involved, and urgent personal appeals by mail and telegraph addressed to members of the Senatorial Steering Committee and other prominent Senators. The effect was what might have been expected from such comprehensive and vigorous work. The Senatorial leaders, who heretofore have regarded the bill as menacing one or two industries only, at once recognized its wide scope and the great danger that threatened manufacturers in all lines throughout the country, and they thereupon decided to exclude the bill from the parliamentary programme.

The members of the Steering Committee have been deeply impressed with the uncompromising manner in which the manufacturing interests have squarely met the issue presented by this bill. The labor leaders have so frequently boasted that the manufacturers, while desiring the death of the bill, would not fight it "in the open," that an impression had come to be entertained here that manufacturers feared to antagonize the measure lest it might result in some form of retaliation on the part of the labor organizations. The fearless stand taken by the members of the National Association of Manufacturers, however, has dispelled this impression and has operated as notice to Congress that hereafter the manufacturers of the country can be counted upon to treat so-called labor legislation in the same aggressive, business like manner in which other industrial problems are invariably met.

Some very effective, though unobtrusive, work against the Eight-Hour bill has been done by representatives of the several executive departments. As heretofore stated, the departments have recently been in receipt of many communications from contractors giving notice that in the event of the passage of the Eight-Hour bill they would be unwilling to execute continuing contracts at current rates. Some manufacturers have announced that they would not enter into contracts hereafter unless a clause should be inserted nullifying the agreement in the event of the passage of the Eight-Hour bill. These facts have been quietly brought to the attention of the leaders of the Senate and have done much to demonstrate the folly of the proposed legislation. Great emphasis has been placed upon the injurious effect of an Eight-Hour law upon the development of the navy, and it has been pointed out that the delays of which so much complaint has recently been heard would be greatly protracted in the event of the passage of the pending bill. In the report recently made to the President by the Navy Department, in explanation of the delay in completing the vessels now under construction, it was stated that the shipyards and subordinate contractors had been unable to secure sufficient skilled labor during the past two years, in spite of the fact that mechanics of all classes were permitted to work overtime. The extent to which construction would have been delayed by the application of a hard and fast eight-hour rule during the same period can only be imagined.

The expectation that an extra session of the Senate will be summoned immediately after adjournment to-morrow has caused some speculation as to whether an effort will be made to present a new Eight-Hour bill. The special session will be a part of the new Congress, and measures introduced therein can be considered by the House when it convenes next December. An effort will be made, however, to confine the work of the special session to the pending treaties, and it is not believed that the committees will give consideration to any other matters. Under the circumstances no progress could be made with the new bill, and it is not believed that another eight-hour measure will be presented until the convening of the House.

W. L. C.

The extent to which metal lathing is now being used is indicated by the fact that in one building just completed in New York no less than 80 carloads were used of the wire lathing manufactured by the New Jersey Wire Cloth Company of Trenton, N. J.



### The Senate Finance Committee During the Recess.

WASHINGTON, D. C., March 3, 1903.—The Senate has adopted a special resolution authorizing the Finance Committee to hold meetings during the coming Congressional recess for the purpose of investigating internal revenue and customs matters with a view to determining what legislation on these subjects should be presented for the consideration of the Fifty-eighth Congress, which will convene December 7 next, unless called by the President in extra session at an earlier date. The resolution authorizing these sittings was prepared by Senator Aldrich and referred to the Committee on Audit and Control of Contingent Expenses of the Senate, which reported it favorably in the following form:

"Resolved, That the Committee on Finance be, and they are hereby authorized and directed, by subcommittee or otherwise, to make an investigation of internal revenue, customs, currency and coinage matters, and to report from time to time to the Senate the result thereof; and for this purpose they are authorized to sit, by subcommittee or otherwise, during the recess or sessions of the Senate, at such times and places as they may deem advisable, to send for persons and papers, to administer oaths, and to employ such stenographic, clerical and other assistance as may be necessary, the expense of such investigation to be paid from the contingent fund of the Senate."

The resolution was adopted by the Senate without debate and by unanimous consent. Its presentation by Senator Aldrich is regarded as significant not only by reason of the investigation which it authorizes, but also on account of the fact that it is intended to forestall other inquiries which have been proposed by prominent leaders of both Houses. A few weeks ago Senator Lodge introduced a resolution directing the Committee on Finance to inquire and report to the Senate whether any foreign countries discriminated against the products of the United States in the assessment of tariffs and also as to whether it was advisable to enact a tariff schedule of maximum and minimum duties as the basis of new reciprocity agreements. Senator Lodge moved the reference of this resolution to the Committee on Finance, but Senator Aldrich suggested that it should "lie over" as he desired to submit some remarks on the subject. Although six weeks have since passed Senator Aldrich has not seen fit to refer to the resolution, and it is therefore still on the Senate table. Under the terms of the resolutions adopted, however, the Finance Committee has full authority to make the inquiry proposed by Senator Lodge, and also to report upon the advisability of the adoption of the maximum and minimum tariff system, although under the constitution the framing of new schedules would devolve upon the Ways and Means Committee of the House.

#### Revision of the Tariff.

It can be stated on good authority that Senator Aldrich's resolution does not contemplate the planning of any revision of the tariff during the coming recess; in fact, the adoption of the resolution is counted upon to aid in postponing revision as long as possible. Having acted on this resolution, the Senate will not consent to the concurrent resolution recently introduced in the House by Representative Tawney providing for recess meetings of a joint committee of the two Houses "to thoroughly inquire into and investigate the present conditions of domestic and foreign production and the necessity for any modification of the duty on any or all of the articles upon which duty is now imposed by law; whether any reduction thereof can be made consistent with reasonable protection to American industry and labor; by what means and in what manner the foreign trade of the United States can best be promoted and extended, and whether or not the tariff system known as the maximum and minimum tariff possesses for the production, industries, business interests and foreign trade of the people of the United States advantages superior to our present conventional and general tariff system."

It is the hope of the leading members of the Finance Committee that there will be no tariff legislation in the

next Congress. Senator Aldrich is opposed to any changes within the next two years, or at least until after the next Presidential election. Senator Platt of Connecticut shares this hope. It cannot be stated, however, that the majority of the committee agree with these two Senators; but, on the contrary, it is known that there is a widespread opinion that certain important schedules of the Dingley act should be revised next winter. Such sittings of the committee as are held during the coming recess will be by subcommittee, and will undoubtedly be controlled by Senator Aldrich; hence whatever may be done in the Fifty-eighth Congress, it is not believed that the recess meetings of the committee will be utilized to prepare tariff legislation of any kind.

#### Revenue Matters.

It is the purpose of the committee, however, to give serious attention to a number of important problems relating to the revenue. Senator Aldrich has for a number of years planned to investigate during the recesses of Congress the advisability of a reduction in the tax on distilled spirits for the double purpose of reducing the burden on those industries in which alcohol is used in large quantities for manufacturing purposes and of increasing the total revenue. In the opinion of many experts, the present rate of \$1.10 per gallon is above the so-called "revenue point," and it is thought that a rate of 90 cents, or even 70 cents per gallon, would produce larger returns. Manufacturers have been working for this reduction for several years, and those engaged in the production of varnishes, paints, lacquers, &c., which are largely consumed by the metal trades, have had a prominent part in the movement. A reduction of the present tax would enable these manufacturers to discard wood alcohol, which they are now using at a disadvantage because of its inferiority, and employ grain alcohol, which for metallic lacquers, &c., is much more desirable.

#### The Customs Administrative Act.

The Senate Committee will probably also give considerable attention to the question of certain much desired modifications of the customs administrative act. An investigation into the operation of the present laws was made some time ago by a subcommittee, of which Senator Platt of Connecticut was chairman, but no action was taken. Secretary Shaw has also recommended to Congress a number of important changes, and these recommendations will be considered by the Finance Committee in connection with representations that have been received from prominent importers and business organizations. It is not expected that meetings of the Finance Committee will be held before September, but in the meantime considerable material will be gathered by experts. The scope of the investigation outside of the general subject of internal revenue will probably depend to some extent upon the representations that are made to the committee prior to its meetings early next fall.

#### The Reciprocity Treaties.

With the adjournment of the Fifty-seventh Congress at noon to-morrow the French and other reciprocity treaties negotiated under Section 4 of the Dingley act will again be stricken from the executive calendar of the Senate. The French treaty will not expire until next September, but unless an extra session is called it will be a dead letter before Congress reconvenes, and in no event is favorable action probable, although the ratification of the treaty has been strongly recommended by the Committee on Foreign Relations.

There seems to be no prospect that any of the treaties will be ratified, although perfunctory extensions may be made from time to time. Section 4 of the Dingley act, under which these treaties were negotiated, is therefore looked upon as a dead letter and the administration will negotiate no more reciprocity conventions until specifically directed to do so by Congress. The adoption of a maximum and minimum tariff system is receiving some consideration in this connection, and is known to be favorably regarded by Senator Aldrich and other prominent Senate leaders. With such a system on the statute books treaties could be negotiated and promulgated without further action by Congress, and in



view of the history of the pending conventions it seems hardly probable that the principle of reciprocity will be worked out in any practical form until further legislation on the subject has been enacted. W. L. C.

### The Jacobson Friction Clutch Pulley and Cut Off Coupling.

The friction clutch pulley and the cut-off coupling recently placed on the market by the Jacobson Machine Mfg. Company of Warren, Pa., are noticeable for their simplicity of design, strength and ease of adjustment. The gripping or friction segments are made in two equal parts and are forced into engagement with the friction surface by two wedges, which are placed diametrically opposite each other and which enter spaces between the adjoining ends of the segments. These wedges are operated by elbow levers actuated by the sliding sleeve on the shaft. The segments are lined with wood, which

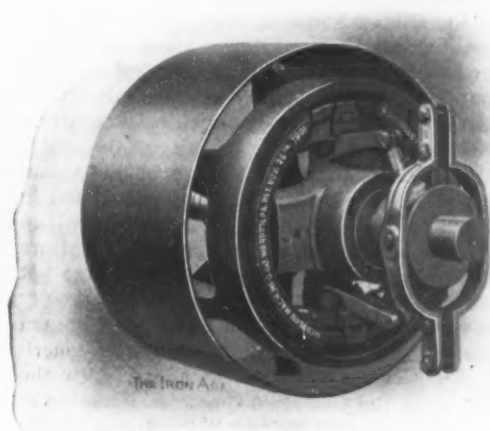


Fig. 1.

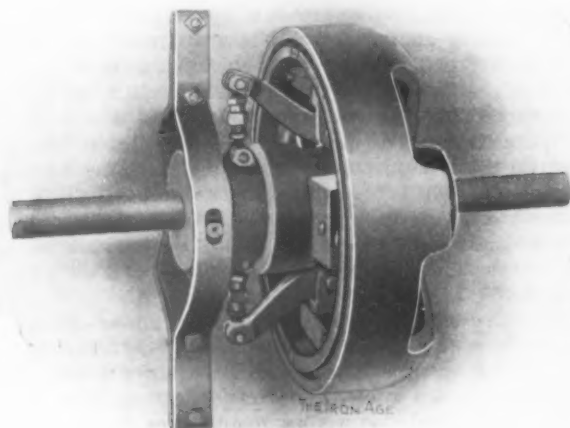


Fig. 2.

THE JACOBSON FRICTION CLUTCH PULLEY AND CUT OFF COUPLING.

can be easily renewed when necessary. The other end of each elbow lever is attached to the sliding sleeve by a link, the length of which can be adjusted in order to increase or decrease the movement of the wedges, and in this way regulate the pressure exerted by the segments. All the standard pulleys are made with a cast iron bushing, which forms the wearing part of the hub, this bushing being so arranged that it may be removed without taking the pulley from the shaft, and a new bushing substituted. This clutch used as a cut off coupling is shown in Fig. 2. It is the same in every respect as the one just described, except that the friction ring is an independent piece without an extended hub for carrying a pulley. All these pulleys are made upon the interchangeable plan so that renewal of parts can be conveniently made.

**The Baldt Stockless Anchor.**—At a recent test of anchors made by the United States Government, in which foreign and domestic anchors were in honest competition for merit, the Baldt stockless anchor was the only one of the many tested that was openly indorsed. The Baldt Anchor Company of Chester, Pa., are now making for the United States Government 16 anchors weighing 16,500 pounds each, and six weighing 13,000 pounds each. The firm have recently shipped to the Boston Navy Yard 11 16,500 and three 13,000 pound anchors, making a total of over half a million pounds for the 40 anchors. Nearly all the torpedo boats and torpedo boat destroyers are equipped with the Baldt anchors, also a great many of the transports in the United States Navy.

### The Babcock & Wilcox Trade Name.

The Babcock & Wilcox Company, manufacturers of water tube steam boilers, New York, are distributing circulars giving the full text of the decree obtained by them December 23, 1902, in the United States Circuit Court for the Southern district of New York, in their suit against the Aultman & Taylor Machinery Company and Thayer & Co. for infringement of their trade name. It appears that the defendants had made use of the names "Babcock & Wilcox" or the initials "B. & W." in advertising their boilers and the fact was established to the satisfaction of the court that these names and initials had been respectively originated and adopted exclusively as the trade name of the business of the Babcock & Wilcox Company. The decree covers not only these names and initials, but prohibits the use of such expressions as "the Babcock & Wilcox type of boiler." The company are also distributing circulars giving the full text of the perpetual injunction issued by the court

against the defendants, prohibiting them from using these names or initials.

**A French Consolidation.**—A movement is progressing to consolidate two of the large iron and steel works of France, the Compagnie des Forges et Aciéries de la Marine et des Chemins de Fer at Saint-Chamond, Loire, and the Société Anonyme de Vezin-Aulnoye of Maubeuge, Nord, the former with a capital of 20,000,000 francs and the latter with 13,500,000 francs. The Saint Chamond Works are famous for guns, armor and projectiles and make rails, forgings, tires and track material; have a crucible steel plant at Assailly, Loire; a forge at Rive-de-Gier, Loire; blast furnaces and a Bessemer plant at Givors, Rhone, and blast furnaces, a Bessemer and open hearth steel works and rail and beam mills at Baucau, Basses-Pyrenees. They also possess coal and iron mines in France and iron mines in Sardinia and Spain. The Vezin-Aulnoye Company have blast furnaces at Maxeville, near Nancy, and at Aulnoye-lez-Berlaimont, Nord; forges and rolling mills at Maubeuge, Nord, and at Haumont, Nord, where bars, shapes, rails, &c., are rolled. For some years past the company have been building a very large plant at Homecourt in the Meurthe-et-Moselle district, very close to the German border. The works, which are on modern lines, are to include six blast furnaces, a basic Bessemer plant with four converters and splendid mills. It is estimated that the new consolidation will have a capacity of 650,000 tons of metal per annum, or about one-fourth of the production of France, and will manufacture a very wide range of products.

## Canadian Notes.

### Manufacturers and the Tariff.

TORONTO, February 28, 1903.—The protectionist sentiment of Canada's industrial interests found vent the other evening at a banquet in Brantford, Ont., given by the manufacturers of that city to the members of the Canadian Manufacturers' Association. The guests, representative of that association, were from all parts of Ontario and from the city of Montreal. Brantford is a busy center of manufacturing industry. Iron and steel are the chief materials consumed there. C. H. Waterous presided. O. P. Letchworth, who responded to the toast, "The President of the United States," pointed to the history of the United States as a proof of what could be done by a protective tariff. Since, he said, iron was an important ingredient in the screws he manufactured, it would be a benefit to him to have the duty on pig iron removed. Yet he did not think it should be lowered a single penny. Its retention would encourage the manufacture of pig iron at home and result in general good. This same argument, he maintained, held all along the line.

Cyrus A. Birge, president of the Canadian Manufacturers' Association, replying to the toast, "Our Industries," remarked that the manufacturers were united not simply for the purpose of advancing their own interest, but also for the purpose of building up Canada. "It is sometimes thought," he said, "that we take pretty strong ground on the matter of tariff in holding against the manufacturers on the other side of the line. Perhaps we do; but it is against them simply as foreign manufacturers, but we are prepared with open arms to receive as many of them as will follow the example of Mr. Letchworth and come over and join us in building up Canada."

George E. Drummond, Montreal, of the Canada Iron Furnace Company, spoke to the same toast, saying among other things that in a material sense, we not only possessed a foreign trade, and were becoming in proportion to our population a very wealthy people, but, as statistics showed, we possessed in our railway system and our St. Lawrence waterways the finest of transportation facilities, which must be developed not only for the benefit of the manufacturers, but of the farmers as well. In view of all these advantages, he asked why it was that Canada hardly held her natural increase in population. He believed that one of the greatest reasons why we were in this position was that in the past we had laid almost the whole burden of national life on agriculture. That was not right. Agriculture could not bear all. A country that was wise tried to provide employment for all its people. We must have a tariff sufficient and adequate to secure all Canadian industrial products against the products of foreign labor. He also strongly advocated the extension of technical education.

Other speakers supported the call for more protection, but Thomas Brooks, a representative farmer who was present, made a straightforward speech against any increase in the tariff. The farmers, he declared, would kick like mules against such increase.

### Programme of Manufacturers.

A preliminary visit to Ottawa was made by a small deputation of the Canadian Manufacturers' Association, with the object apparently of ascertaining what reception the great representative delegation, bearing the detailed scheme of tariff revision the association is preparing, would meet with. Nothing has been publicly given out as to the results of the interview, but it is understood that they returned with the conviction that there will be no tariff revision in the approaching session. That being so, it is not a matter of certainty that the manufacturers will go to the capital in the large force they were expected to muster in support of the association's schedules. The intimation that nothing was to be expected this session caused much unfavorable comment in manufacturing circles, comment that is scarcely in accordance with the association's profession that its members regard the tariff as out of politics. After the reports of the Government's intention to

leave the matter alone became current, some of the manufacturers declared rather emphatically their intention to keep the tariff in politics. They showed a strong disposition to use their influence to force the Government's hand on the issue. If, however, any attempt is made in the coming session to make the Government raise the tariff against its will, such attempt is almost certain to be defeated, that is, unless Mr. Tarte, an ex-member of the Cabinet, can exercise enough influence from his seat as a private member of the House to lead a large number of the French members against the Government on the question. Otherwise the Government's large majority will solidly uphold its policy of deferring action. "Deferring action" is what the Government will call its refusal to do anything now, though the truth of the matter is it probably hopes to present to the House some other plan in the early future. It is generally believed to be entertaining the idea of

### Reciprocity with the United States.

Circumstances give some color to this view. At the present time the outlook for reciprocity with the United States seems to Canadians to be brighter than it was when the Joint High Commission began its negotiations. Sentiment in the United States toward the idea of reciprocity in general seems more favorable than it was three or four years ago. Even when the last meeting of the Joint High Commission was indefinitely adjourned, a reciprocity arrangement between Canada and the United States seemed not to be out of the range of possibility. John Charlton, M.P., one of the Canadian members of the Joint High Commission, stated in a magazine article that very fair progress toward an agreement for reciprocal trade had been made. Failure to come to a settlement, it will be remembered, was not on account of insuperable differences on the reciprocity question, but because the parties could not find common ground on the Alaskan Boundary dispute. The American Commissioners were prepared to go on with the other questions, but the Canadian Commissioners maintained that until articles covering all the items of the protocol were agreed upon, nothing should be concluded. For the breaking of this deadlock provision has now been made. The Alaskan Boundary treaty, referring to a commission of jurists the interpretation of the boundary clauses of the Anglo-Russian treaty of 1825, takes that blocking question away from the Joint High Commission of diplomats, and leaves the latter free to go on with the consideration of the other questions. Senator Fairbanks has made overtures to Sir Wilfrid Laurier for the reassembly of the Joint High Commission, and Congress has provided in the estimates for the expenses of further meetings. Sir Wilfrid Laurier, however, has replied that he would prefer to have the meeting put off for awhile.

It is generally believed that the motive of the Canadian Premier in so replying is to gain time for its own political purposes in this country. To embrace at once the opportunity to treat for reciprocal tariff concessions would turn from it the support of the manufacturers and wage earners. That would be very impolitic on what everybody believes to be the eve of a general election. Though the life of the present Parliament does not naturally run out for about two years, it is the common opinion that the next session will be its last. Sir Wilfrid Laurier's health has been very bad for several months. If he should consult his own wishes he doubtless would seek the peace and quietness of private life. But the leading influences in his party would like him to lead them in one more campaign, after which his retirement might take place. So just now it would be bad tactics to give a positive yes or no to the manufacturers, who ask for a higher tariff, as it would be to accept or decline unconditionally the invitation of the American Commissioners to resume negotiations. Sir Wilfrid Laurier would like to carry on a campaign in which both the protectionist and reciprocity advocates would be with him. After the election, should his party be returned—unless again Mr. Tarte should make trouble—there is little doubt the preference of the Liberals would be for reciprocity. The consideration of that fact



may cause the manufacturers to be very active in politics next election. It is protection from the United States not reciprocity with the United States, that they want.

C. A. C. J.

### Scientific and Technical Notes.

A unique planing machine has recently been installed in the Washington Navy Yard, for the purpose of finishing the surfaces of the propellers used in the tank in which models of war ships are tested. The ponderous machine weighs 10 tons, while some of the propellers on which it operates weigh only 2 pounds each, their diameters varying from 5 inches to 2 feet. Although designed especially for planing helicoidal surfaces, there is a provision for planing irregular surfaces, by means of cam wheel attachments. The propellers planed may have two, three or four blades, may be either right or left handed, and the blades may be all in one plane, or they may be tilted either forward or backward, not to exceed 10 degrees. The bronze castings are bolted to a circular table, which is given oscillatory motion about a vertical axis. Above the table, the setting for the tools heads has an up-and-down movement, governed by the position of the fulcrum on a walking beam. The feeds are automatic, and when all are thrown in the four tool heads and two cam rollers work in unison.

The two battle ships recently launched from English yards, and built to the order of the Chilean Navy, are unquestionably the most powerful ships of their size ever constructed. The main element of their tremendous artillery strength lies in the secondary battery of 14 7.5-inch rapid fire guns which they carry. This is a substitute for an equal number of 6-inch guns carried by the average ship of this size (11,800 tons), and is of more than double the power shown by the usual 6-inch battery. It is estimated that with all the guns firing at their maximum speed each vessel could deliver in one minute  $13\frac{1}{2}$  tons of steel projectiles, whose collective muzzle energy would amount to 1,700,000 foot tons, or enough, could it be properly applied, to raise the ship bodily through a height of 144 feet. The guns are all of the modern long caliber, high velocity type, with the latest pattern of breech mechanism, designed to facilitate rapid loading. Not only this, but as 18 of the guns fire shot of 200 pounds and upward, the carrying power is much enhanced over that of the discharge from previous ships. In fact, the energy remaining in one of these 7.5-inch shells at a range of 2 miles is equal to that with which a 6-inch shell leaves the muzzle of its gun, and is more than two and one-half times that of the latter shell at the same range. In view of the treaty relations existing between Chile and Argentina, it is not at all certain that these splendid ships will ever enter the Chilean service. It is understood that both Japan and Spain have been negotiating for their purchase, but up to date they have not been transferred to either of these powers.

*Aluminum World* is authority for the statement that an alloy consisting of 18.87 per cent. of aluminum and 81.13 per cent. of antimony is a marked exception to the general rule that alloys are more fusible than the least fusible metal contained. Aluminum and antimony melt at nearly the same point, which is in the neighborhood of 1160 degrees F.; this alloy does not melt until a temperature of 1976 degrees F. is reached. Most alloys are denser than their constituents; this alloy is less dense. Quantitatively, 7.07 cubic inches of aluminum, alloyed with 12.07 of antimony, produce 23.71 cubic inches of alloy, thus showing an increase in volume of 4.55 cubic inches, or 24 per cent.

A balloon belonging to the French War Department is to carry across the Sahara six pigeons, whose safe passage will be supposed to show the feasibility of the plan. As the trip may require four or five days, the recording thermometer and barometer have clockwork set to operate during that period. A camera, carrying a long strip of film, is so arranged that exposures will be made

by clockwork at intervals of fifteen minutes, night and day. Leakage is to be balanced by water ballast, released by a valve when the ground is touched by a ball suspended from the car.

A unique steam turbine installation is about to be made at the Cumberland Mills, Portland, Maine. Most of the current for the present electric drive is supplied by a water power plant, and the balance by a steam power plant. The new steam turbine will be used for relay purposes, trouble being sometimes experienced with the water power system, due to irregularity of water supply. The turbine is of 540 horse power, taking steam at 165 pounds pressure, after it has traversed the distance of 350 feet separating the boiler house from the engine house. Before entering the turbine the steam will be superheated about 100 degrees F., by means of an independent superheater, fired by waste hydrogen gas rising from electrolytic baths used in the process of manufacturing at this plant. The gas has heretofore been a waste by-product. The steam "economy" will be about 13.5 pounds per electrical horse-power hour, which means about 11 pounds per indicated horse-power hour.

It was discovered some months ago that a nickel-steel alloy, containing 36 per cent. of the former metal, has a coefficient of expansion far below that of wrought iron, it being only 0.0000005 for 1 degree F. It is also said to resist oxidation remarkably well. Recent investigations have shown the added fact that by the addition of small quantities of iron or nickel to the least expansive alloy it is possible to form an alloy having almost any desired coefficient of expansion. In this way "planite" is made, having the same coefficient as platinum, and also, of course, as glass. This new substance bids fair to supplant platinum (which has become far more expensive than gold) in the manufacture of incandescent lamps, where platinum terminals now pass through the glass.

The *Electric Review* (London) says that a piece of old blue print paper can be used to determine the positive and negative poles of an electric wire. All that is necessary is to moisten the paper and apply it to the terminals of which it is desired to determine the polarity. In a few seconds it will be bleached in the vicinity of the negative terminal.

In a recent paper read before the Institute of Electrical Engineers (Great Britain) the author placed a very discouraging prospect before those scientists who are endeavoring to perfect some means of "getting electricity direct from coal" without the intermediation of some form of prime-mover. He says that it is the dream of the electro-chemist to devise an electrolytic cell in which the consumed electrode is carbon. This he believes impossible, for the reason that at ordinary temperatures carbon is practically inert; it forms no ions, and therefore can give no electromotive force. At high temperatures oxygen, sulphur, silicon, and to some extent nitrogen, and many of the metals, combine with carbon but there is no dissociable salt of carbon formed. The carbon cell thus seems impossible.

A French engineer is alleged to have discovered alloys for aluminum which impart to this metal most extraordinary qualities. By varying the amount of his alloy from 1 part in 12 to 1 part in 240 he obtains compounds varying in tensile strength from 29,000 to 58,000 pounds per square inch. These are so different in characteristics that they may be chased, soldered, brazed, forged, rolled into plates and leaves, or drawn into wire, all depending on the amount of the alloy. It can be made soft, like pure aluminum, or stiff and rigid like steel, and possessed of nearly the same strength, on one-third the weight.

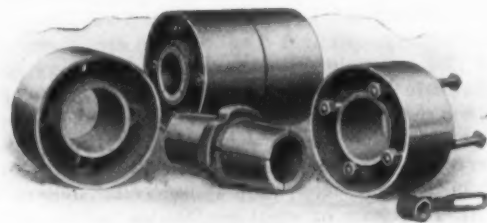
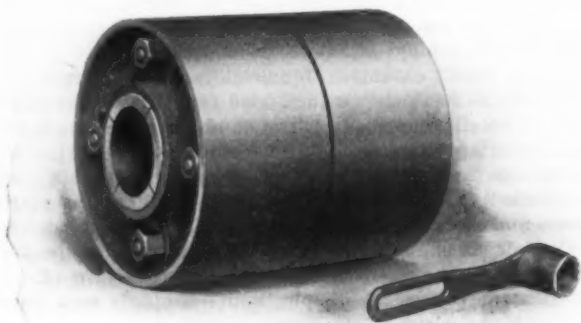
Yale Sheffield School is to have several new buildings. Byers Hall will contain quarters for the Y. M. C. A., and have some dormitory accommodations. Kirtland



Hall will be a laboratory, and two dormitories are to be built, as a gift from Frederick W. Vanderbilt, of the class of 1876. There are now nearly 800 students in the scientific school, and the faculty numbers 78.

A large hydro-electric power plant is being built near Mishawaka, Ind., on the St. Joseph River, by the St. Joseph & Elkhart Power Company. The works include a dam and power house, and will supply electric light and power to South Bend, Mishawaka, and Elkhart. The electrical equipment will include four 1000-kw., 13,200-volt revolving field alternators, two 125-kw., direct current exciters, and a high tension switch-board fitted with electrically operated oil break switches. All the generators will be direct-connected to horizontal turbines. The unusual feature in the plant is the extremely high voltage at which the main units generate their power.

The Pennsylvania Railroad Company reports a run of the New York and Chicago Special from Crestline, Ohio, to Fort Wayne, Ind., a distance of 131 miles, in 123 minutes, including four stops. The Lake Shore and Michigan Southern Railroad Company also reports



THE ESTES COMPRESSION COUPLING.

a run of its Twentieth Century Limited from Toledo to Elkhart, a distance of 134 miles, in 127 minutes; part of this latter run was made in a dense fog. The respective rates of speed are 63.9 and 63.3 miles per hour.

The depot of the Long Island Railway Company, at Long Island City, was burned to the ground in December last. A temporary depot was at once begun, under the direction of the superintendent of the road, and was completely erected in 17½ hours of actual work. The new structure is a wooden building, 20 feet wide and 150 feet long, with 38 windows and 6 doors, and runways leading to the train platforms. The frame is covered with novelty siding, and a gravel roof. The building is equipped with stoves, electric lights, ticket offices, information bureau, telegraph office and station master's office. The construction was accomplished by employees of the road.

The executive board of the National Association of Blast Furnace Workers was in session in Youngstown, Ohio, last week. Among those present were: James McMahon, national president; W. J. Clark of Buffalo, national secretary; Thomas Laughlin, first national vice-president and president of the Buffalo union; Charles Hardy of Ironton, Ohio; Henry Hamburg of the Hanging Rock Furnace, near Ironton; William Ferguson of Leetonia, David Welsh of Girard, and Thomas Struthers. It is understood that the two important questions considered were the matter of bringing about an equalization of wages among blast furnace labor all over the country and also the establishment of a uniform eight-hour day.

In the courts at Pittsburgh last week an answer was filed in the equity suit of the Brown Hoisting Machin-

ery Company of Cleveland against Local No. 3, International Association of Bridge and Structural Iron Workers, and certain of its members, to restrain them from interfering with the plaintiff's workmen at the Isabella furnaces. It is denied on the part of the defendants that they combined and attempted to accomplish unlawful practices by threats, menaces and intimidations, or epithets addressed to the men employed by the plaintiff company; but on the contrary have counseled peace and lawful methods for the securing to the membership of the union fair rates of wages, reasonable conditions of employment and protection.

### The Estes Compression Coupling.

The parts of the compression coupling made by the Estes Mfg. Company of Rochester, N. Y., are here illustrated, assembled and separated. The slots are cut the entire length of the sleeve, giving a uniform contact on both shafts and greatly increasing the compression. Both shells are bored tapering in order to compress the segments of the sleeve upon the shaft. By the use of reduction sleeves shafts of different diameters may be united. The design of the coupling is such that it may

be readily used as a pulley and, owing to its compact form, there is no danger of belting or clothing being caught in it.

**The Iron Production of Sweden.**—The Swedish Ironmasters' Association reports the following as the production of iron and steel in Sweden:

	1901. Metric Tons.	1902. Metric Tons.
Pig iron.....	528,375	524,400
Bloom and bar iron.....	164,850	183,600
Bessemer ingots.....	77,231	85,200
Open hearth ingots.....	190,877	198,300

During the last quarter of 1902, 119 blast furnaces, 295 hearths, 21 Bessemer and 42 open hearth furnaces were in operation, as against 100, 242, 15 and 42, respectively, in the corresponding period of the previous year.

The Lake Erie limestone quarries along the Mahoning Valley between Youngstown and New Castle have just resumed after a bitter strike of the Italian labor, which is employed in large numbers. This company are reported to be considering the opening up of extensive limestone fields in Lawrence County, near East Brooke, and as close to New Castle as the quarries now operated by them along the Mahoning.

**The Watson Ball Bearing Electric Motor.**—In a recent issue of *The Iron Age* a description was printed of the Watson ball bearing electric motors. These are made by the Mechanical Appliance Company. We stated erroneously that this company are located in Chicago, when as a matter of fact they are located at Milwaukee, Wis.

## ✓The Courts on Organized Labor.\*

BY JAMES A. MILLER,

Chairman Legal Committee of Building Contractors' Council,  
Chicago.

It is the belief of most employers who perforce have to deal with labor unions that their aims and methods are often such as would justify the intervention of the courts for the protection of the employer and of the independent workman from their control.

It is to be regretted that the efforts of the employers in opposing the demands and methods of the unions believed to be unlawful have not more often resulted in resorts to the courts. Much good would ultimately come of it. To encourage resort to the courts in such cases is the object of this article.

The Supreme Court of the State of Wisconsin, February 27, 1900, in *Gatzow vs. Buening* (81 N. W. Rep., page 1003), says:

"There is clamor for laws to prevent combinations, while law exists that condemns most of them, which is as old as the common law itself, and sufficiently severe to remedy much of the mischiefs complained of that are actual, yet violations of such law are so common, and the remedy it furnishes so seldom applied, that its very existence seems in many quarters to be little understood."

One reason why the law as to these interferences with the business of the employer by labor organizations is so seldom invoked is the ignorance of the employer as to the law upon which he can call for protection. Another is the ignorance of most lawyers as to what labor unions really are; which ignorance prevents the lawyer from rightly understanding the decisions that are in the books.

As this article is intended for readers who are not lawyers, a few definitions of words and terms to be employed is perhaps necessary.

When the word unlawful is used, it may mean an act making the one committing it liable for civil damages. The act itself may or may not be criminal. It is also important to realize that the rulings of the courts are as important in defining the laws of the land as are the acts of the Legislature making the laws. Under our system of government what is called the common law is in force except in those particulars where it has been set aside by specific statute. Common law, in a word, is the law as laid down by the decisions, not governed by statutes, of the different courts of last resort in this country and in England.

What is called "labor law" is more thoroughly settled and established by the Federal courts, and by Massachusetts and Pennsylvania, for instance, than it is by almost any other State, largely because the courts of these States and the Federal courts have had more labor litigation than have courts in other States. Employers unfortunate enough to be located in States where the law of labor combination has not been established by decisions of the Supreme Court of those States can get into the Federal courts by becoming residents of another State, as the Federal courts have jurisdiction over all controversies between citizens of different States. The easiest way to secure this diverse citizenship is to incorporate in some State other than the one where the labor troubles are expected.

The definition of the rights of the employer and of the employee, as given by Eddy on Combinations (page 409), is "Every man, whether employer of employee, is entitled to carry on his business and dispose of his labor according to his own pleasure so long as he keeps within the law. If any one in the exercise of such rights occasions loss to another the other has no ground of action."

To reduce that to more precise terms and to fit it to the question under discussion, I would say that any number of employees, in one or more factories, or in one or more trades, may combine to stop work simultaneously, provided they break no contract in doing so, and provided that the object to be attained by the strike is a lawful one, and that the concert of action is entered

into and maintained voluntarily without threat of intimidation.

### The Right to Persuade.

The men who have stopped work cease to be employees at the moment they strike and have no more right to interfere with the business of their former employer than have outsiders. That is to say, they have no right to interfere with his securing other men to take their places, nor have they any right to interfere with those who do take these places.

They have no right to persuade those who remain at work, or those who have taken the places of the strikers, to abandon their employment, provided those who are so at work are under contracts that would be broken if the persuasion was successful. They have no right to persuade those who are at work to abandon their employment or to persuade those who are about to go to work not to do so, provided those they want to persuade are not willing to listen to them.

I myself doubt the right of those who have already struck to persuade those who remain to stop working even if they are not under contract and are not unwilling to listen to them, but if the strikers could be restrained from everything but persuasion of men who are not under contract, and who are willing to listen to them, perhaps no serious harm would be done if the right to do that is left them.

As this statement of the relative rights of employer and employee is so different from that held by all labor leaders and their lawyers and at variance with the law as enunciated by many judges of the lower courts, I will show upon what decisions of courts of last resort it is based.

It seems hardly necessary to cite authorities to sustain the statement that employees who are under contract for a definite period of time, or until the finishing of some particular piece of work, have no right to strike before the termination of that contract, but I will mention *Arthur vs. Oakes*, Circuit Court of Appeals, Seventh Circuit, 63 Fed. Rep., page 321, decided October 1, 1894. The court held:

"A combination or conspiracy to procure an employee or body of employees to quit service in violation of the contract of service would be unlawful, and in a proper case might be enjoined."

The object to be attained by the strike must be a lawful one.

"But it is said that it cannot be unlawful for an employee either to threaten to quit or actually to quit the service when not in violation of his contract, because a man has the inalienable right to bestow his labor where he will and to withhold his labor as he will. Generally speaking, this is true, but not absolutely. If he uses the benefit which his labor is or will be to another by threatening to withhold it or agreeing to bestow it or by actually withholding it or bestowing it, for the purpose of inducing, procuring or compelling that other to commit an unlawful or criminal act, the withholding or bestowing of his labor for such a purpose is itself an unlawful and criminal act."

(Judge Taft, decision 54 Federal Reporter, page 737.)

The concert of action must be entered into and maintained freely and voluntarily. The Vermont court said:

"When the will of a majority of an organized body in matters involving the rights of outside parties is enforced upon its members by means of fines and penalties, the situation is essentially the same as when unity of action is secured among unorganized individuals by threats or intimidation. The withdrawal of patronage by concerted action, if legal in itself, becomes illegal when the concert of action is procured by coercion. The voluntary acceptance of by-laws by members of an association providing for the imposition of coercive fines for the violation of association rules does not remove the fact of their coerciveness."

In this connection read the definition of the word "strike," quoted with approval by the United States Circuit Court of Appeals, Seventh Circuit, October 9, 1894, in *Arthur vs. Oakes* (63 Fed. Rep., page 310):

"I am, however, of the opinion that strikes are not necessarily illegal. A 'strike' is properly defined as a simultaneous cessation of work on the part of the work-

\* Reprint from Volume II, No. 1, *Bulletin Corporations Auxiliary Company*, Cleveland.



men, and its legality or illegality must depend on the means by which it is enforced and on its objects. It may be criminal, as if it be a part of a combination for the purpose of injuring or molesting either masters or men; or it may be simply illegal, as if it be the result of an agreement depriving those engaged in it of their liberty of action similar to that by which the employers bound themselves in the case of *Hilton vs. Eckersley*, or it may be perfectly innocent, as if it be the result of the voluntary combination of the men for the purpose only of benefiting themselves by raising their wages, or for the purpose of compelling the fulfillment of an engagement entered into between employers and employees, or any other lawful purpose."

#### Picketing.

In regard to picketing: Every decision of a court of last resort I have seen that has passed on the question says that picketing in any form, peaceably or otherwise, is unlawful.

One of the recent Federal cases enjoins picketing and defines it as being "The establishment and maintenance of an organized espionage upon the works and upon those going to and from them."

Strikers must not attempt to persuade to stop work, or not to go to work, those who are unwilling to listen to such persuasions. The Supreme Court of Pennsylvania in *O'Neil vs. Behanna et al.* (July 15, 1897, 37 Atl. Reporter, page 843):

"It is further urged that the strikers, through their committees, only exercised ('insisted on' is the phrase their counsel use in this court) their right to talk to the new men to persuade them not to go to work. There was no such right. These men were there presumably under contract with the plaintiff, and certainly in search of work, if not yet actually under pay. They were not at leisure, and their time, whether their own or their employers', could not lawfully be taken up, and their progress interfered with, by these or any other outsiders, on any pretense or under any claim of right to argue or persuade them to break their contracts."

A very recent case upon the right of strikers to persuade those who are unwilling to listen to their persuasion is *Frank vs. Herold*, decided June 3, 1902, by the Court of Chancery of New Jersey (52 Atl. Reporter, page 152).

The court says:

"In my judgment any conduct on the part of any person which tends to hinder or prevent another from working if he or they choose to work is an unlawful infringement of the personal rights of that individual. It is urged that one person has a right to persuade another to work or not to work. That may be if the other person is willing to listen. . . . Is it lawful at all for the defendants to use any means to prevent these girls from working for the complainants beyond mere persuasion to which the operatives may be willing to listen? . . . My answer to that is that if they have the right to do it at all, it must be with the consent of the operatives; it must not be forced upon them in an offensive manner, either at their homes or as they pass along the streets."

In *Anchor Buggy Company vs. Atherton et al.* (Ohio Law Bulletin, vol. 47, page 547, June 30, 1902), Judge Smith of the Court of Common Pleas, County of Hamilton, State of Ohio, decided a picketing case in part, as follows:

"It is a well-known principle of law, both on civil and criminal procedure, under the code, that every person intends the natural results of his own acts. And while, in itself, there may be no harm in one person, or even two or more, loitering or standing in the neighborhood of a factory or other place, nevertheless, this act in itself, associated with the facts that there is a lock-out or a strike, that the men who loiter and patrol and picket are employees who have been discharged, that they are members of the union whose purpose, under the evidence, is to stop the operation of the factories of the plaintiffs, so far as they can, until the men in their employ have been discharged, or have joined a union, is a link in the chain whereby the defendants do picket and congregate, loiter and patrol the neighborhood of plaintiff's factory, with the intent to interfere with the em-

ployees of plaintiffs, and for the purpose of intimidating and interfering with such employees because the evidence shows that, by reason of this, intimidation did result to the employees of plaintiffs.

"In this respect the plaintiffs and their present employees are entitled to the protection of the court, and this by reason of their constitutional rights. The constitution of this State, as well as of the United States, guarantees to each and every individual the right to contract, and that contracts shall be inviolate. This being so, the employer has the right to contract with individuals as individuals, and each man, as an individual, has a right to contract with his principal for labor and employment. And in this case it is manifest to the court that the constitutional right guaranteed to the plaintiffs and their employees has been infringed by the defendants.

\* \* \* \* \*

"In this respect the court would say that the defendants, while they may not have been guilty, each individually or collectively, of actual threats or assaults, nevertheless, by their actions they have violated the restraining order by their conduct, in that they have picketed, patrolled and loitered about the plaintiffs' factories and in that neighborhood and elsewhere, with the intent and for the purpose of intimidating and interfering with plaintiffs' business and employees; and this was the result that has taken place, notwithstanding defendants might claim the right to be in the neighborhood of plaintiffs' factories and deny the intent with which they were there.

"In order that the defendants may understand more fully and appreciate the finding of the court, and that they may not again be in contempt thereof, the temporary restraining order heretofore issued may be modified whereby they may be restrained from in any manner interfering with any persons in the employ of the plaintiffs, and from in any manner interfering with any person who may desire to enter or to remain in the employment of the plaintiffs, whether under the pretense of persuasion, or by way of threats, violence, insults, intimidation or other means calculated or intended to prevent such persons from entering into or continuing in the employment of the plaintiffs, or to influence or induce such persons not to enter into or to leave their employment."

It is settled beyond any question that it is unlawful for a third party to interfere to cause the breaking of a contract, even by persuasion, no matter whether it is a contract between a workman and an employer, or between a contractor and an owner (*Angle vs. Chicago, St. P., M. & O. Railway Company*, United States Supreme Court, January 3, 1894. 4 Supreme Court Rep., page 240).

"Where one adopts a system in his business of employing only nonunion workmen and of stipulating in his contracts with them that they shall join no union, interference therewith by outsiders enticing and endeavoring to entice them to join a union will be enjoined, it appearing that such interference is injurious to the employer."

(*Placcus vs. Smith*, Supreme Court of Pennsylvania, April 15, 1901, 48 Atlantic Reporter, page 894; *Southern Railway Company vs. Machinists' Local Union*, Circuit Court W. D. Tenn., October 1, 1901, 111 Federal Reporter, page 49.)

"The violation of a contract is an unlawful act. Therefore, if one or more persons conspire with another to commit, or two or more persons combine together to effect, such violation, and the object of the combination be consummated to the damage of a third person, such third person has his action to recover the damages against him who breached the contract, and every person who by reason of the combination is connected with the wrongs."

(*Martens et al. vs. Reilly et al.*, Supreme Court of Wisconsin, January 8, 1901, 84 N. W. Rep., page 840.)

One of the most interesting of the cases decided in 1901 (*Moran vs. Dunphy*, Supreme Court, Mass., January 4, 1901, 59 N. E. Rep., page 125; 52 L. R. A., page 115) is directly on this point:



"In view of the series of decisions by this court (naming them) we cannot admit a doubt that maliciously and without justifiable cause to induce a third person to end his employment of the plaintiff whether the inducements be false slanders or successful persuasion is an actionable tort. Again, in the case of a contract of employment, even when the employment is at will, the fact that the employer is free from liability for discharging the plaintiff does not carry with it immunity to the defendant who has controlled the employer's action to the plaintiff's harm. So again it may be taken to be settled that motives may determine the question of liability; that while intentional interference of the kind supposed may be privileged if for certain purposes, yet if due only to malevolence it must be answered for. Finally, we see no sound distinction between persuasion by malevolent advice and accomplishing the same result by falsehood or putting in fear."

In *Erdmann et al. vs. Mitchell et al.*, Court of Common Pleas, Equity Jurisdiction No. 3 of Philadelphia, November 26, 1901 (*Legal Intelligencer and District Reports*, vol. 10, page 701), it was decided that:

"The rights of enjoying liberty, of acquiring property and of pursuing his own happiness, inherent and inalienable in every man, guaranteed under the bill of rights . . . necessarily includes the right of a workman to work when, where and as he pleases, without let or hindrance by others, and such right is one of the rights of individuals within the protection of the Chancellor.

"A combination to coerce workmen to become members of a trade union or to interfere with them in working or in obtaining work to induce them to become members is unlawful, and all acts done by members of the combination in furtherance of such intention, by interfering with the freedom of employers in their lawful employment of such workmen, if accompanied by damage, are acts contrary to law and prejudicial both to the interests of the community and to the rights of individuals."

In *United States vs. Haggerty*, Circuit Court N. D. W. Va., July 24, 1902, 116 Fed. Reporter, page 510, which was printed in the October *Bulletin*, the most important declaration would seem to be that:

"The action of third persons, having no interest in the contracts between workmen and their employers, in conspiring to control the action of the workmen and to induce them to strike by means of threats, intimidations or a resort to any other modes usually employed in such cases, is an illegal and malicious interference with the employer's business, which a court of equity may properly enjoin where it is necessary to prevent irreparable injury."

The court puts the same idea again in these words:

"It seems to be the well settled rule of law in its application to strikes that the power of the court may be involved to restrain and inhibit a combination which is formed to induce employees who are not dissatisfied with the terms of their employment to strike for the purpose of inflicting injury and damage upon the employers."

As showing how unlawful and criminal are the threats so often made by union officials to independent workmen and employers the case of *Fisher vs. State* may be quoted. This is the Supreme Court of Wisconsin, October 11, 1898, 76 N. W. Reporter, page 594.

It was charged that a walking delegate said to some three independent workmen on a building: "You cannot build this building. I will fight it if it takes all summer; and if you will not protect us we will get the militia."

The court says:

"This language seems to be sufficient to authorize a finding that the accused did 'by threats, intimidation, force or coercion,' attempt to hinder or prevent the persons named and others from engaging or continuing in the lawful work or employment mentioned."

The Supreme Court therefore upheld the lower court in fining the walking delegate \$100 for violating the law against intimidation of workmen by threats, &c.

That the boycott and the sympathetic strike (a form of the boycott) are unlawful is held in *Toledo A. A. &*

*N. M. Railway Company vs. Penn Company*, 54 Fed. Rep., page 730 and 746; also in *Thomas vs. Railway Company*, 62 Fed. Rep., page 817, and in *Moore & Co. vs. Bricklayers' Union*, *Weekly Law Bulletin*, vol. 23, page 48.

#### The Sympathetic Strike.

In *Quinn vs. Leatham* (House of Lords, November 16, 1901, *Law Times*, vol. 85, page 297) in speaking of the ordered sympathetic strike the court says:

"As to plaintiff's rights. He had the ordinary rights of a British subject. . . . This liberty involves liberty to deal with other persons who were willing to deal with him. This liberty is a right recognized by law: its correlative is the general duty of every one not to prevent the free exercise of this liberty without justification. But a person's liberty as right to deal with others is nugatory unless they are at liberty to deal with him if they choose to do so. Any interference with their liberty to deal with him affects him. If such interference is justifiable in point of law he has no redress.

"Again, if such interference is wrongful, the only person who can sue in respect of it is, as a rule, the person immediately affected by it; another who suffers by it has usually no redress; the damage to him is too remote; and it would obviously be practically impossible and highly inconvenient to give legal redress to all who suffered from such wrongs.

"But if the interference is wrongful and is intended to damage a third person and he is damaged in fact—in other words, if he is wrongfully and intentionally struck through others and is thereby damaged, the whole aspect of the case is changed! The wrong done to others reaches him, his rights are infringed although indirectly, and damage to him is not remote or unforeseen, but is the direct consequence of what has been done."

These words would seem to also exactly fit the coercion exercised by the union when it compels its members, under threat of fines, to stop working for the purpose of injuring the employer, "damaging a third person." The question of the right of a union to injure others through coercion of its own members is one that should be brought before the courts whenever possible. Heretofore strikes have usually been considered by the courts to be the voluntary action of all taking part in them. I am of the opinion that when the facts are properly laid before them they will no longer concede the right to strike without defining what they mean by a strike.

The law as to the liability of those engaged in an unlawful conspiracy is—roughly speaking—that each is liable for the acts of any of those so engaged. What this means in a criminal case is shown in *State vs. McCahill* (Supreme Court of Iowa, December 3, 1886—30 N. W. Reporter, page 553; also June 21, 1887, 33 N. W. Reporter, page 599). In this case a lot of strikers surrounded a house in which one Munson was killed; the defendant was convicted of manslaughter and given three years in the penitentiary, though it was only proven that he was with the body of men who were present for the purpose of frightening or driving Munson and his collaborators from the mines, although he did not fire the shot that killed Munson.

#### Injunctions.

As to injunctions: On complaint and the proper showing that the complainant has sufficient grounds for believing that he is about to suffer loss of property through some unlawful act (that is, through some act for which those committing it should be liable for civil damages), and that his remedy at law—through a suit for damages—is inadequate through the irresponsibility of the defendants or through the fact that such a multiplicity of suits would be required as would make that remedy impracticable, or through the fact that the acts complained of are continuing so that a new suit would be required every week or every month, the court will or should restrain the defendants from doing or order them to cease doing the acts complained of. If this order is disobeyed those disobeying it, with knowledge of the order, can be severely punished by the judge by fine or imprisonment. If the persons so restrained wish to do so they can appeal from the order of court to a higher tribunal, just

as those who have been punished can appeal from the order of punishment.

There are those who complain of this as government by injunction, but it seems to me that the vital objection of it, from the union's point of view, is that in the hands of a good lawyer, and before a judge who is not afraid of labor politics, it is very effectual. Wherever it can be applied it seems to me to be—as far as it goes—in the direction of compulsory arbitration. For instance, the unions say they have the right to picket an employer's plant; they perhaps even think they have such right. The employer denies it. Why is it not in the line of good government to refer the matter to a court having competent jurisdiction and take its decision, especially as its decision can be enforced?

In *Davis vs. Zimmerman* (36 N. Y. Sup., page 303, December 18, 1895), the court says:

"It is far better for employers and employees and for the peace and safety of the State that such relief (injunctions in strike cases) be exercised by the courts, where parties can be heard, than to permit such violations of law to go unrestrained until force is arrayed against force, and the stronger arm of the executive is compelled to intervene with troops to prevent disorder and the destruction of property."

It would seem that much good might be done by united and intelligent effort by the employers, through the courts, in restraining and restricting the labor organizations from their unlawful actions.

This can be done by raising funds to assist in the prosecution of the cases of those employers who are willing to go into court.

There are objections, however, to an individual going into court against a labor organization. The union has other methods of fighting than through the courts; they are sometimes able to compel the dismissal of a case before a final decision is reached, in which event but little is accomplished.

In many cases it is better to organize a small stock company and fight the unions in the courts through it. The identity of the actual owners of the company need never be disclosed. The company can get into all sorts of rows with the unions; get into injunction cases and damage cases, and when enough cases have been taken into court the company can stop operations until the court of last resort has passed on the cases. If an injunction has been applied for and if it is finally obtained the company will then be in good shape to go ahead and do work in disregard of the unions and their unlawful orders.

It can readily be conceived how valuable as an asset to a "strike breaking" corporation would be an order from the court restraining the unions from interfering with their lawful business in any unlawful way.

All the suggestions regarding the changes in the wage scale of the Amalgamated Association of Iron, Steel and Tin Workers, to be submitted to the annual convention of the organization in Columbus next April, have been filed with the general officers of the organization in Pittsburgh. They are being printed and will be sent out to all lodges. It is said that while many changes in the organization are proposed and some alterations in the wage scale were suggested, comparatively few of the lodges had sent in any suggestion regarding an advance in wage rates.

At Pittsburgh, William H. Latshaw, first vice-president of the National Tube Company, has resigned his position. He has been succeeded by Edward Worcester, at present general sales agent, who will in the future fill both positions.

The Pennsylvania Engineering Works at New Castle, Pa., have sold some of their recent increase of capital stock to foremen in different departments. The new building of this company is now about completed.

The Link-Belt Engineering Company of Nicetown, Pa., have established a branch office at Savannah, Ga., with Wayne Cunningham as resident engineer.

## The Coal Mining Industry of the South.

BY FREDERICK E. SAWARD, NEW YORK.

There is no section of the country where the coal output has increased so rapidly within recent years as in the South, and this must continue to be so, because there the mineral lies in such position as to be readily mined at a comparatively low rate per ton, and the railroads are all anxiously looking for this tonnage and building into new fields at all times; the quickening influence of the industrial development is also a great factor in the situation and must continue for years to come. Certain of the returns are now available for last year, and they show continued growth.

In Alabama there has been the most marvelous development in recent years, and, therefore, it is not surprising to learn that the output has gone beyond the 10,000,000-ton mark. As an example of progress, this schedule from the mine inspectors' report is of interest and value:

*The Coal Production of Alabama.*

Year.	Tons.	Year.	Tons.
1897.....	5,893,771	1900.....	8,247,921
1898.....	6,504,960	1901.....	8,776,110
1899.....	7,484,763	1902.....	10,327,713

The work on the Warrior River navigation is progressing, and it is claimed that within two years there will be 6 feet of water at all times, so that barges of 500 tons capacity can be loaded at the mines alongside its banks and floated to Mobile, and the total cost of coal, f.o.b. there, will not exceed \$2 a ton, making it the cheapest fueling port in America.

Next in importance is West Virginia, and considering the time lost in Fayette and Kanawha counties by reason of the strike, the record for 1902 is a good one, for the Fairmont and Norfolk and Western districts went above their normal tonnage. The C. & O. in December was able to show a total for the month better than in the same month a year ago, so that it has recovered from the ill effects of the strike in that particular at least. The Chesapeake & Ohio Railway Company are preparing to extend a double track eastward from Guyandotte. It is the intention of the company to double-track their entire system. Details of the growth show as follows, the figures from 1892 to 1901, inclusive, being from the United States Geological Survey:

*The Coal Tonnage of West Virginia.*

Year.	Short tons.	Year.	Short tons.
1892.....	9,738,755	1898.....	16,700,999
1893.....	10,708,578	1899.....	19,252,995
1894.....	11,627,757	1900.....	22,647,207
1895.....	11,387,961	1901.....	24,068,402
1896.....	12,876,296	1902 (estimated)....	25,500,000
1897.....	14,248,159		

Virginia contains a very large and important district in the southwestern counties, and there were no particular labor troubles there during the past year, so that the tonnage is a good one; this is one of the most important feeders for the Norfolk & Western Railway system. In the State of Virginia the production, according to Survey reports, has grown as follows:

*The Coal Production of Virginia.*

Year.	Short tons.	Year.	Short tons.
1892.....	675,205	1898.....	1,815,274
1893.....	820,339	1899.....	2,105,791
1894.....	1,299,083	1900.....	2,393,754
1895.....	1,368,324	1901.....	2,725,873
1896.....	1,254,723	1902 (estimated)....	3,000,000
1897.....	1,528,302		

The principal districts, as usual, are Tazewell and Wise counties.

Kentucky is growing rapidly and the returns at hand show that last year there were something over 6,000,000 tons shipped to market, and the is an index of what could be done under good arrangement, for ten years ago the total was not one-half of the quantity named; the United States Survey statistics show the growth to have been as follows:

*The Coal Production of Kentucky.*

Year.	Short tons.	Year.	Short tons.
1892.....	3,025,313	1898.....	3,887,908
1893.....	3,007,179	1899.....	4,607,255
1894.....	3,111,192	1900.....	5,328,964



1895.....	3,357,770	1901.....	5,469,986
1896.....	3,333,478	1902 (estimated)....	6,200,000
1897.....	3,602,007		

It is only within the past few years that one has heard much of the development of the coal resources of the State of Tennessee, and growth there has been due to the enterprise of Northern capitalists, who are now likely to make a showing in the output of the coal resources of Tennessee; there is an abundance of good coal there, and it can be readily mined and disposed of. The production in Tennessee has grown as follows:

*The Coal Production of Tennessee.*

Year.	Short tons.	Year.	Short tons.
1892.....	2,092,064	1898.....	3,022,896
1893.....	1,902,258	1899.....	3,330,659
1894.....	2,180,879	1900.....	3,509,562
1895.....	2,535,644	1901.....	3,633,290
1896.....	2,663,106	1902 (estimated)....	4,300,000
1897.....	2,888,849		

One of the most surprising growths is that of Arkansas, for it is but a decade of years since her tonnage was only 300,000 tons, and now the mine inspector informs us that it should be credited with 2,125,730 tons for last year; this is likely to be increased, for there has been some investment there within the past year by prominent men of Western Pennsylvania, who have seen the great advantages that will ensue from the development of the smokeless fuel of this State. During the latter period of the anthracite strike scarcity some Arkansas anthracite was sent to Chicago with good results.

In the Indian Territory there is also a large development of the coal resources, and while in 1890 there was 752,832 short tons to its credit, in the year 1901 the total was 2,406,945 tons. The record, according to the Geological Survey, is shown below:

*The Coal Production of Indian Territory.*

Year.	Short tons.	Year.	Short tons.
1891.....	1,091,032	1897.....	1,336,380
1892.....	1,192,721	1898.....	1,381,466
1893.....	1,252,110	1899.....	1,537,427
1894.....	969,606	1900.....	1,922,298
1895.....	1,211,185	1901.....	2,421,721
1896.....	1,366,646	1902 (estimated)....	3,000,000

The Rock Island is a large operator here and the extension of various lines of railroad is opening up new fields. It is quite a noticeable fact, however, that all the veins that have recently been opened and the new portions of the veins previously worked in other parts of the Territory are all of a much steeper pitch than anything heretofore worked.

The railroads in Texas have placed large orders for new equipment during the past year, and are now receiving new coal cars and engines, which will in part enable the mines to move their production in a more satisfactory manner than during the past three years. The railroads, however, are large beneficiaries in the general increase of business, and their own consumption of coal has increased in proportion, making it difficult at times to keep them supplied. The opening up of the new Territory of Oklahoma and its rapid settlement has opened up more valuable trade in the Indian Territory mines, and it will in all probability make up for the displacement of so much coal by oil that the prosperity of the coal trade will continue to a great extent and possibly be the means of furnishing a market for all the coal produced in the Indian Territory. In spite of the oil discoveries, there is not any falling off in the coal output, which has been as follows in the years named, according to the United States Geological Survey:

*Coal Production in Texas.*

Year.	Short tons.	Year.	Short tons.
1895.....	484,959	1899.....	883,832
1896.....	544,015	1900.....	968,373
1897.....	639,341	1901.....	1,107,953
1898.....	686,734	1902 (estimated)....	1,200,000

The mines in Maryland continue to show a large production, in view of the fact that it is one of the oldest of the coal-producing districts in this country; there has been an increase in its output year by year, until for that of 1902 it is credited with a total of 5,019,647 gross tons, mainly the output of the Consolidation Coal Company and one other concern. It is hardly necessary to state that the Baltimore & Ohio Railroad gathers the

bulk of the revenue to be derived from the haulage of the coal of Maryland, in addition to the extra tonnage given it by branches in Pennsylvania and in West Virginia. This coal tonnage is one of the great resources of wealth and profit to this line, and it caters to it to the fullest degree. The growth of the trade in Maryland coal in recent years has been as follows:

*Coal Production of Maryland.*

Year.	Short tons.	Year.	Short tons.
1892.....	3,419,962	1898.....	4,674,884
1893.....	3,716,041	1899.....	4,807,396
1894.....	3,501,428	1900.....	4,024,688
1895.....	3,915,585	1901.....	5,113,127
1896.....	4,143,936	1902.....	5,622,003
1897.....	4,442,128		

The figures for the production of coal in the Southern States for last year foot up 61,175,446 tons for the States named.

**Coke.**

There was about 7,000,000 tons of coke produced, and this was no great change from the preceding year, for Alabama showed only 2,232,326 tons, a very slight increase over 1901, and West Virginia 2,500,000 tons, owing to the labor troubles. This was not a very large increase over the preceding year. Virginia did about 1,000,000 tons, and the remainder scattered from Kentucky to Georgia. This coke production brings one to the consideration of the fact that the important feature in trade circles is the growth of the demand for and the use of coke. There has not been in many years such scarcity as was experienced during the past season, and this has awakened every user thereof to the necessity of a provision for the future. It is this which has caused the development of new sources of supply and the investment by users of this fuel in properties on their own account to a degree hitherto unknown. This development in the trade dates back to the announcement of the H. C. Frick Coke Company, that after the first of the current year its supply would no longer be dealt with commercially, but that it would all be needed for the operations of the United States Steel Corporation. In order to provide themselves with a supply of fuel, therefore, furnacemen and others have made investments in properties wherein a coking coal could be found, and naturally attention is at first drawn to the great resources of the Southern States.

The soft coal carrying companies have agreed to an advance in the rates of transportation on this variety of fuel, dating from April 1, and this means a great deal to such corporations as the Baltimore & Ohio, the Chesapeake & Ohio, the Norfolk & Western, and to other lines in the South. One need but take the total tonnage of any of these lines, and on the basis of an advance of only 10 cents a ton on the through business, it will readily be seen that it means enough to help very considerably toward dividends; the report of the Norfolk & Western for December, which has just been received, shows a tonnage at the rate of nearly 8,000,000 tons annually. The last Chesapeake & Ohio return is at the rate of 6,000,000 tons, and the Baltimore & Ohio is surely carrying 10,000,000 tons, on which an advanced rate of transportation will be had. All the coal mining companies tributary to these lines have made a voluntary increase in the rate of wages to their employees, dating from January 1, so that no trouble is looked for in that direction. The proprietors of these coals have within the past few days made a new schedule for the season contracts, and they will be considerably in advance of the rate made for this coal, at tidewater points, last year, from 50 to 65 cents per ton in fact. The time has passed—it was about five years ago—when the best coal in the world for steam raising was sold at the nominal figure of \$2.25 at New York harbor; a rate that did not admit of more than 85 cents to the carrying companies. After April 1 they will get 50 per cent. more money, and on a very much larger tonnage, and the grand feature in all this is that the demand for this fuel is an increasing one. The outlook is surely good, as it is unlikely there will be any demand for increased wages on and after April 1, for the increase on January 1 puts labor here in the most favored position.



# The Iron Age

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## The Iron Trade of Germany.

Aside from the general interest which attaches to the development of the iron industry of a country which is third in rank as a producer, the iron makers of this country are watching Germany, because it is now regarded as its most serious competitor. During the past few years the trade of the world has been profoundly affected by the course of events in Germany, and it is with evident relief that the makers in other countries learn of the reports of an improving tendency there. For many years the iron industry in Germany progressed without a halt, the movement culminating in 1900, which year witnessed a reaction bordering on a collapse. Staggered and incredulous for a brief period, the German iron and steel makers promptly sought relief in pushing for an export trade with unexampled energy. The course of events in this country gave them welcome and opportune aid, since it not only led to our practical withdrawal from the world's markets, but converted us from competitors into highly important customers. But even so, the achievements of the Germans in the last two years in forcing an expansion of their export trade are noteworthy, and reveal a capacity which our own manufacturers should not underrate when the day comes when we, too, must again seek foreign outlets. A study of the statistics may serve to prove the magnitude of the movement and to reveal some of its features, within the limitations set by figures of this character.

The German official statistics present the export figures in a series of groups, first among which is pig iron, old material and muck bars and steel billets. The export of these rose from 224,000 metric tons in 1900 to 505,563 tons in 1901 and 1,152,292 tons in 1902, the detailed figures in the latter two years being as follows:

### General Exports—Metric Tons.

	1901.	1902.
Old material.....	153,399	168,909
Pig iron.....	150,448	347,256
Muck bars and billets.....	201,716	636,427
Totals .....	505,563	1,152,592

How much of this tonnage fell to the share of this country, it is impossible to determine. The direct exports to the United States rose from 76 tons of old material in 1901 to 23,207 tons in 1902, those of pig iron from 5939 to 49,506 tons and those of steel and muck bars from 1644 to 99,740 tons. This, however, does not reflect the total movement, because large quantities are credited to the Netherlands, Belgium and Great Britain which really were in transit for us. Thus the exports to the Netherlands show a jump from 2416 to 89,928 tons of pig iron and from 1510 to 42,811 tons in billets; to Belgium, from 52,581 to 108,811 tons of pig and from 57,684 to 87,311 tons of steel, and finally to Great Britain, from 28,932 to 39,954 tons of pig and from 112,279 to 362,917 tons of steel. German authorities claim, with much show of justice, that practically the whole of our imports of steel were furnished by that country.

The second group of products in the German export

tables deals with the heavier rolling mill products, the list including the following:

### Exports of German Rolling Mill Products—Metric Tons.

	1901.	1902.
Structural shapes.....	342,447	382,122
Angles, bars and tees.....	36,450	44,198
Tee plates.....	6,260	4,762
Rails .....	180,978	366,815
Bars .....	329,513	361,216
Plates and sheets.....	255,627	273,021
Polished, copper plated plates and sheets.....	8,128	10,487
Tin plate.....	54	51
Wire .....	154,285	147,732
Tinned, coppered, polished wire.....	14,488	13,296
Totals .....	1,407,319	1,676,284

The most striking increase is in the item of rails, and it is interesting to note that the United States is credited with direct shipments of 1236 tons in 1901 and of 87,133 tons in 1902. Since our own imports of rails from all countries in 1902 were only 63,500 tons, it is quite evident that a considerable part of the tonnage credited to us is really material in transit for Mexico and Canada. The direct shipments to those countries from Germany were, respectively, 2460 and 24,235 tons for the former and 9774 and 24,523 tons for the latter. Cuba showed an increase from 775 tons in 1901 to 13,467 tons in 1902. There was a fair increase in the exports of shapes, but deducting the shipments to the United States, quite a sharp decline. The shipments to this country jumped from 487 tons in 1901 to 23,777 tons in 1902.

A third group deals with what the report terms "Very Coarse Iron Goods," and which includes the following:

### Exports of Very Coarse Iron Goods—Metric Tons.

	1901.	1902.
Coarse castings.....	27,730	32,157
Anvils, crowbars, &c.....	4,888	5,329
Anchors, chains, &c.....	2,149	940
Bridges and bridge work.....	8,973	9,642
Wire rope.....	3,971	3,131
Rough forgings for machinery.....	2,512	3,097
Railroad axles, wheels, &c.....	49,257	47,491
Ordnance .....	268	572
Tubes and pipe.....	48,377	55,464
Totals .....	148,125	157,823

In this group the United States does not play any part, except in the item of axles, wheels, &c., in which the exports to the United States amounted to 3679 tons in 1901 and to 4552 tons in 1902. This tonnage, it is fair to suppose, covers the amount of business done with this country in locomotive tires.

The fourth group deals with "Coarse Iron Goods," and includes wire nails, bolts and nuts, enameled ware, galvanized ware and tools. The totals are 241,681 tons in 1901 and 275,769 tons in 1902. It includes 54,477 and 55,167 tons, respectively, of wire nails.

A fifth group, that of "Fine Iron Goods," shows growth from 44,207 to 46,247 tons.

The grand totals are 2,346,895 tons of iron and steel exported from Germany in 1901 and 3,308,715 tons in 1902, a growth of very close to 1,000,000 tons in one year.

On the whole, the principal growth in the tonnage has been in the raw materials, the intermediate products and in the heavy lines, to which we, as customers, contributed a very large percentage. This will largely explain the nervousness with which Germany, like the other European producing sections, watches the course of the markets here. It means that unless there is a further world wide expansion in the consumption of iron and steel, and unless the German home markets take a normal tonnage, any serious decline in our purchases must tell on values. In fact, it is probable that should our prices of pig iron and steel move downward strenuous efforts will be made to hold a share in our markets, at least for a while, by concessions to American buyers.

### British Progress Toward Standardization.

Press dispatches from London announce that another important stage has been reached in the work of standardizing iron and steel sections. The report of the Engineering Standardization Committee has been completed, and the statement is made that its recommendations are in favor of sections which approximate very closely those in use in the United States. The British Government is actually co-operating in the work, having promised the support of all heads of departments. This is of much importance, as the Government is a heavy purchaser of iron and steel in many forms. The powerful backing thus given to the standardization movement will undoubtedly be of great assistance in overcoming the disposition of British engineers to insist on special sections and peculiar shapes to suit individual designs. It has taken a long time to secure action by the engineering societies, but now that a committee appointed by them has actually agreed upon a report which is presumably in favor of adopting a limited number of sections in every character of structural work, it is to be hoped that the result of its labors will not be discredited by the great body of British engineers. Their exceeding conservatism in this respect has long been appalling to the progressive American engineer, who instead of using his inventive genius in trying to devise a new pattern of rolled work has put his wits to their utmost in so designing a structure that shapes could be ordered from stock if necessary to secure speedy delivery.

The cablegram which reports the completion of the committee's work calls attention to the heavy reduction in the cost of structural steel which standardization will effect. A considerable saving will undoubtedly be accomplished in this respect, judging from experience in this country. The multiplicity of sections which once obtained here caused such frequent changes of rolls that the expense of production was necessarily augmented considerably. Special sections being in limited demand, only small quantities of them were rolled and often not enough to keep a train of rolls employed for a whole turn. This caused a great waste of time and restriction of output as compared with producing a section on which a train of rolls can run for days or weeks continually, and if actual orders booked are exceeded by the production the surplus can be put in stock as strictly merchantable as though it were plain merchant bar. Standardization will also enable the British manufacturer to deliver more quickly and avoid the delay which has so frequently caused him to lose bridge and other contracts in competition with manufacturers in Germany or the United States.

It will, of course, be necessary for the British engineer to change his own methods completely and think and plan according to standard, instead of permitting his talent for design to wander fancy free whenever he is called upon to prepare plans for a bridge, a building, a ship or a locomotive. It will be a serious struggle for him, especially if he is a railroad engineer, who has designed and given his name to every section of rolled metal on the line from rails to bridge bolts. It would be hard for him to convince himself that a Pennsylvania Railroad pattern 90-pound rail would actually be suitable for his main line with its heavy traffic when he had a pattern of his own exclusive design that no other road had ever used or whose engineers would ever think of using. But after once making a start, possibly he and other British engineers will continue to progress along this line just as American engineers have done. Many

of these have learned within the past year that it is quite desirable under special circumstances to adapt themselves to still fewer standards. The production of our structural mills thus recently was greatly increased, and deliveries were often made with much greater satisfaction to everybody, when engineers scrutinized their plans more thoroughly and substituted very common sections for those they had intended to use, modifying the plans to conform to the change. The extraordinary pressure on the mills for more rapid delivery of material made this almost necessary. The lesson thus learned will probably continue to be practiced in the future—at least in this country.

### January Imports and Exports.

The Bureau of Statistics of the Treasury Department has issued the detailed statement of imports and exports for January, which shows a continued increase in our imports of iron and steel and a corresponding decrease in our exports of the same commodities. The total value of these imports, excluding iron ore, in January was \$1,948,417, against \$1,950,645 in January, 1902. For the seven months ending with January the value was \$31,245,980, as compared with \$13,959,629 in the corresponding period of the previous fiscal year.

Taking the commodities for which the weight is given, the following table of imports has been compiled from the statement, the tons used being tons of 2240 pounds:

Commodities.	January.		July to January.	
	1903. Tons.	1902. Tons.	1903. Tons.	1902. Tons.
Pig iron.....	110,679	7,883	620,455	51,237
Scrap.....	12,803	3,284	86,367	16,526
Bar iron.....	7,277	1,363	27,813	14,979
Rails.....	5,405	449	55,205	1,744
Hoop, band or scroll...	48	743	944	3,510
Billets, shapes, &c., n.e.s.	38,691	5,309	241,937	9,664
Sheets and plates.....	1,774	481	5,302	4,874
Tin plates andterne plates.....	5,298	7,058	28,888	59,370
Wire rods.....	1,888	1,365	14,473	9,749
Wire and articles made from.....	237	290	1,787	2,597
Totals.....	184,100	28,225	1,083,171	174,250

These figures show a heavy increase in nearly every instance. A conspicuous exception is in the case of tin plates, in which the imports have diminished instead of increasing.

The exports, also taking commodities for which the weight is given, were as follows:

Commodities.	January.		July to January.	
	1903. Tons.	1902. Tons.	1903. Tons.	1902. Tons.
Pig iron.....	1,431	7,233	12,172	45,191
Scrap.....	196	636	3,923	8,458
Bar iron.....	378	2,224	6,391	6,108
Wire rods.....	460	215	17,974	5,370
Steel bars.....	2,121	1,545	6,146	11,850
Billets, ingots, blooms..	37	276	1,512	2,249
Hoop, band and scroll..	144	424	679	1,025
Iron rails.....	10	132	45	596
Steel rails.....	454	14,386	19,246	132,539
Iron sheets and plates..	139	348	1,790	2,817
Steel sheets and plates.	471	616	7,434	5,437
Tin plates andterne plates.....	104	141	635	181
Structural iron and steel	2,699	4,972	19,691	29,295
Wire.....	6,414	7,225	52,364	54,972
Totals.....	15,048	40,373	150,002	306,088

The most conspicuous exception to the general decline in exports is that of wire rods. They show an increase. The decline in the outward movement of steel rail is very heavy.

The total value of exports of iron and steel, excluding iron ore, in January was \$7,437,298, against \$8,088,958 in January, 1902, and \$55,997,942 in the seven months ending January, as compared with \$57,310,128 in the corresponding period of the previous fiscal year. These figures are remarkably large, showing that the exports of machinery and miscellaneous manufactures of iron and steel continue in large volume.

## CORRESPONDENCE.

## Corrugated Furnace Tests.

To the Editor: The descriptive article in your issue of the 19th inst., headed, "A Test of the Brown Corrugated Furnace," made on the 3d inst., at the establishment of the Cramp Shipbuilding Company, seems to pretty fairly describe the developments which occurred upon that occasion. The article, however, would have been decidedly more interesting had it fully stated all the conditions that really did obtain when the hydrostatic pressure was applied to the externals of these Brown improved boiler furnaces, articles which were probably produced with considerable care, because of the knowledge which doubtless obtained with the makers thereof that they were to be transported to America, and there tested before a distinguished body of gentlemen in audience.

The article states that "These tests were conducted by the Board of Supervising Inspectors, United States Treasury Department, under the direction of Supervisor-General James A. Dumont, for the purpose of establishing a 'constant' to determine the working pressure of these furnaces and to show the improvement

structed at the Continental Iron Works during the last 15 or 18 years have abundantly proven that the smaller corrugated portions thereof have always been equally strong with any other parts of the cylindrical surfaces.

Whereas, in the tests at Philadelphia, the inference may be fairly drawn that that portion of the Brown improved corrugated furnace which may be described as the top of the smaller corrugation, and also the thicker part, is in reality the weaker portion of the structure, because, at the late exhibition at Philadelphia, one out of four of the sample furnaces tested ruptured when under a hydrostatic pressure, externally applied to the surface, of about 1300 pounds to the square inch, the rupture splitting the top of the second corrugation of the furnace for a distance of 12 inches in length, and being about  $\frac{3}{8}$  inch wide at one end of the same. The accompanying illustration represents the rupture alluded to.

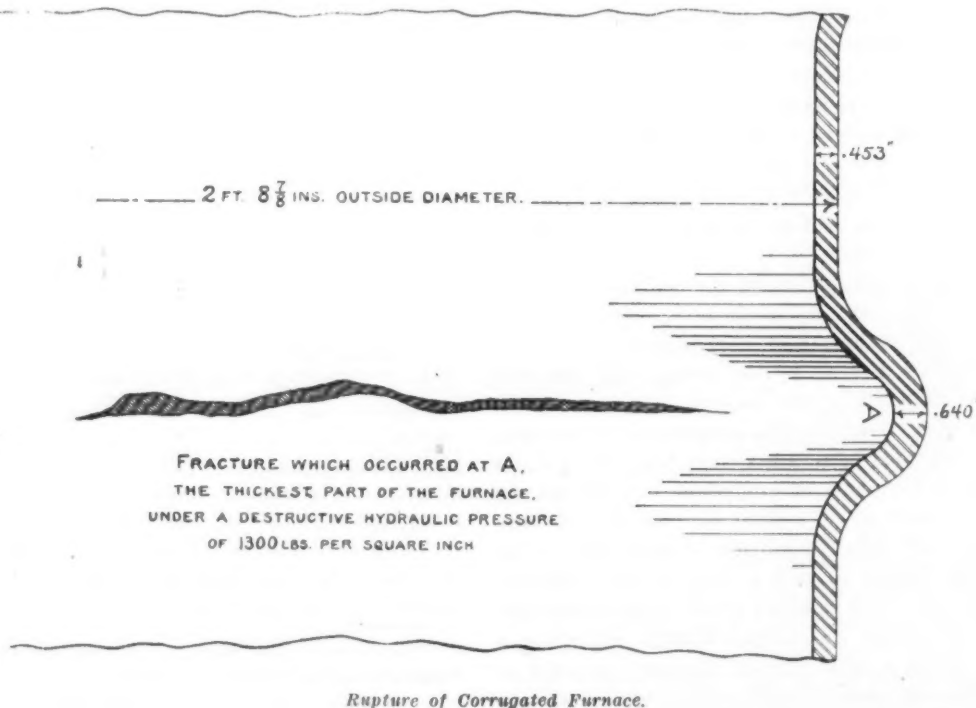
Respectfully,

THOMAS FITCH ROWLAND,

President THE CONTINENTAL IRON WORKS.

BROOKLYN, February 20, 1903.

**National Bolt & Nut Company.**—The National Bolt & Nut Company of Pittsburgh, Pa., chartered with



Rupture of Corrugated Furnace.

in them over furnaces which have been made in the past. The entire Board of Supervisors, as well as a large number of invited guests, were in attendance." It is further stated that "The old style of internally fired furnace is made from an ordinary sheet of boiler plate, welded into a cylinder and afterward corrugated. This process of corrugation, which necessarily increases the diameter of the furnace where the ribs or corrugations are, consequently makes the metal thinner at the top of the corrugation than at any other point, so that the furnace is weakest where it should be strongest. Further than that, the corrugating so punishes or distorts the metal that unequal strains are developed, which, even by annealing, are difficult to remove."

The statement descriptive of the methods of producing the so-called "old style internally fired furnace" (referring, doubtless, to the Standard corrugated furnace type manufactured at the Continental Iron Works) is a crude and not very true description of the manufacture of that article. The act of corrugating the cylinder does not "punish or distort the metal," or leave it subject to unequal strain, but the product comes from the manufacturers' hands a perfect article, of such thicknesses as experience has taught should obtain to make the entire surface equally resistant to external pressure, and the many thousands of this so-called "old style type" of corrugated furnace that have been con-

a capital stock of \$100,000, are an identified interest of Hubbard & Co., shovel manufacturers of that city. Hubbard & Co. have been making bolts for some time, but have experienced some difficulty in getting nuts, and for this reason have decided to go into the manufacture of both nuts and bolts on a more extensive scale. The new company have let contracts for their works, which will comprise a main building 75 x 200 feet, a stock, tapping and threading room 75 x 100 feet and a boiler house 75 x 100 feet. These buildings will be equipped with the most modern machinery, all of which will be driven by electricity. The output of the plant when completed will be from 40 to 50 tons of hot pressed nuts and bolts per day. George L. Maltz of Detroit, will be actively identified with the company, and will occupy the position of treasurer. The headquarters will be in the Murland Building, Pittsburgh, Pa.

**The Passaic Steel Company.**—The Passaic Rolling Mill Company, Paterson, N. J., were merged with the Passaic Steel Company on February 16. The latter company took over the entire capital stock of the Passaic Rolling Mill Company in exchange for their own shares. The Passaic Steel Company will continue the business of the Passaic Rolling Mill Company, assuming all their liabilities and collecting all their assets. The capital of the Passaic Steel Company is \$5,000,000. The directors



are George A. Lee of Philadelphia, Dudley Phelps of New York, and H. F. Bell, J. B. Cooke, A. C. Fairchild and F. F. Leany of Paterson. A. C. Fairchild has been elected president of the Passaic Steel Company, having held the same position in the Passaic Rolling Mill Company during the past few months since the retirement of W. O. Fayerweather.

## MANUFACTURING.

### Iron and Steel.

The plant of the Steel & Iron Aluminum Coating Company, at South Connellsville, Pa., which has been idle for some little time, while new machinery was being installed, has again resumed operations. This company coat iron and steel sheets with aluminum, which are sold in the open market in competition with galvanized. Some consumers use these sheets as a substitute for copper, and they can be soldered with common solder. They have a large number of orders on hand and expect to operate their plant steadily from this time forward.

Extensive improvements have recently been made at the Cambridge works of the American Sheet Steel Company, at Cambridge, Ohio, and this plant has again resumed operations. Among the improvements are a new structural steel annealing building, 100 x 200 feet, with six modern annealing furnaces; new galvanizing department, 60 x 160 feet, equipped with the most modern appliances; addition to the roofing department which makes it 500 feet long, new carpenter shop, machine and blacksmith shops with the newest in machinery. A. T. Entow is manager.

Work will soon be resumed, it is stated, on a new stack which is being erected by the Shenango Valley Steel Company at New Castle. The foundation was completed several weeks since.

The Atlantic Furnace of the Republic Iron & Steel Company at New Castle, Pa., has installed two new Welmer blowing engines. The capacity of this furnace will be greatly increased by this improvement.

The Kittanning Iron & Steel Mfg. Company, operating Rebecca Furnace at Kittanning, Pa., advise us that their stack was started on January 16 after being idle for three months for relining and other repairs. The furnace was banked down again on January 28 for want of coke, but was again started on February 9, and the company hope to be able to keep the stack in operation right along.

The Youngstown Steel Company, operating a blast furnace at Youngstown, Ohio, have given a contract to the Niles Mining & Mill Supply Company of Niles, Ohio, for the building of several 7-ton Larry charging wagons for their coke ovens near Gracetown, Pa.

The E. & G. Brooke Iron Company, Birdsboro, Pa., advise us that there is no ground whatever for the statement that they intend to erect a machine shop. The Diamond Drill & Machine Company of that city have a well equipped shop, and the Brooke company can see no reason for considering the erection of another.

At a recent meeting of the Board of Directors of the Seamless Steel Tube Company of Detroit, Mich., W. C. McMillan was elected president; T. H. Simpson, vice-president; George M. Black, secretary and treasurer; R. H. Phillips, assistant secretary, and C. H. Wood, manager.

Workmen last week commenced laying the bricks for the furnaces of the new 23-inch mill of the Eastern Steel Company, at Pottsville, Pa. The old hot beds are being dismantled, and as soon as the mill is under roof the excavation for the foundations for the open hearth furnaces will be resumed, they having been abandoned on account of severe weather, which has also delayed the concrete work in other parts of the mill. Twelve gas generators have been completed, and six more are being placed.

The report that the American Sheet Steel Company would add four more mills to their Wellsville works, at Wellsville, Ohio, is officially denied.

Upon the application of the creditors an order has been issued for the sale at public auction of the plant of the Continental Iron Company, at Wheatland, Pa. The debts still outstanding amount to \$380,000.

The Empire Puddling Furnace Company of Youngstown, Ohio, have been incorporated under the laws of New Jersey, by William Kent and others. They will build a new design of puddling furnace, patented by William Kent, which has already been illustrated in *The Iron Age*.

The Ohio Rolling Mill, at Findlay, Ohio, is to resume operations. United States Judge Wing has confirmed the plan of paying creditors 33 1-3 cents on the dollar, and under the arrangement the mill will be reopened. William Brenner of Findlay is at the head of the new management. Work of placing the mill in condition has been started.

The Elmira Steel Company, Elmira, N. Y., have been sold to E. B. Leaf & Co. of Philadelphia. This plant covers about 9

acres of ground, and includes two 20-ton open hearth furnaces, a universal mill, a 22-inch mill, also 18, 12 and 9 inch merchant bar trains, about ten puddling furnaces and a puddle train. It has not yet been decided what disposition will be made of this plant.

Jefferson Furnace, Texas, of the Jefferson Iron Company, Chattanooga, Tenn., was blown in March 2, and will produce high grade charcoal car wheel iron. The capacity is 1800 tons per month. The furnace has been completely overhauled and the company have accumulated a large stock of raw material.

### General Machinery.

At the first annual meeting of the Battle Creek Iron Works Company, Limited, recently held in Battle Creek, Mich., the old Board of Directors, consisting of P. T. Colgrove, Miles S. Curtis, Clement Smith, Sylvester Greusel and Frank Bock, were re-elected. The report of progress during the month which the new factory had been running was very flattering and satisfactory to the stockholders.

The Noble & Wood Machine Company, Hoosick Falls, N. Y., have increased their capital stock from \$65,000 to \$75,000 to purchase machinery with which to increase their output. Their plant is now in full operation and the company have moved into their new offices.

The Vulcan Iron Works, Seattle, Wash., manufacturers of machinery, announce that they have opened a supply house where they will carry a full line of engineers' supplies and it is the intention in the very near future to add a general hardware line. The company are also preparing to open branch offices at Tacoma, Evart and Whatcom, Wash. All the stores are expected to be in operation by the end of the current year. The Seattle supply house will be under the management of E. P. Jameson and F. C. Furth.

The Rock River Machine Company, Janesville, Wis., have been reorganized, the former stockholders, Messrs. Morris, Marsden, Shoemaker and Slater, retiring after disposing of their holdings and transferring the plant, trade and good will to the new company operating under the same name. The capacity of the plant has been increased and the company announce that machines previously built will be redesigned and that all will be thoroughly tested before leaving the shop. It is also designed to build special machines, including multiple punches, presses, dies, &c., and to furnish heavy and light forgings, various patterns and castings, in brass and in gray iron.

The annual meeting of the stockholders of the Pittsburgh Valve, Foundry & Construction Company, engineers, founders, pipe fitters and machinists, was held in Pittsburgh last week, at which the following directors were elected: Henry M. Atwood, Joseph T. Speer, Charles A. Anderson, Moses Atwood, R. J. Wilson, John McCaffrey and Charles R. Rodes, the latter two being new members added to the board. Henry M. Atwood was re-elected chairman of the board, Joseph T. Speer president, Moses Atwood vice-president, Charles A. Anderson treasurer, and S. G. Patterson auditor.

Dodge & Day, modernizing engineers, Philadelphia, Pa., have been commissioned by the Ingersoll Sergeant Drill Company to report on variable speed motor equipment for their new Phillipsburg plant, and have been awarded the contract to equip with motor drives a number of the large machine tools.

The Geiser Mfg. Company of Waynesboro, Pa., have awarded to D. W. Hess the contract for the new machine shop at the recently purchased Metcalf Gasoline Engine Company plant at Quincy. The building will be of brick, one story in height and 40 x 80 feet in dimensions. The work will be commenced within the next ten days. The Geiser Company have purchased the patents as well as the plant of the Metcalf Engine Company, and are manufacturing engines over those patterns for use in connection with the Geiser threshing machines. The company last week shipped a steam plowing outfit to Governor Forrest Richards of Wyoming.

The Landis Tool Company of Waynesboro, Pa., have ordered three electric cranes from Pawling & Harnischfeger, Milwaukee, Wis. The cranes will be of 10, 15 and 20 tons capacity, and will be used in the present machine shop and foundry and in the new shop, which will be erected this spring and is expected to be ready for operation by June 1.

The new compressed air ice machine invented by Leicester Allen of the Frick Mfg. Company of Waynesboro, Pa., received a second satisfactory test last week.

The Eddystone Mfg. Company of Eddystone, Pa., last week awarded three prizes of \$50, \$30 and \$20 to workmen for suggestions for the improvement of the machinery of the plant. These prizes are awarded yearly, and all employees of the company are entitled to participate.

The Poore Pump Mfg. Company of Allentown, Pa., have been organized by A. S. Baker, L. A. Patterson, W. H. Hubbard and S. T. Gordon, for the purpose of manufacturing iron or steel, or any article of commerce of iron or steel. A charter will be granted on March 18.

The Allentown Rolling Mills, Allentown, Pa., will ship to the Descubadora Mining & Smelting Company of Descubadora, Mexico, three horizontal quintuplex electric pumps for use in mining. The pumps, which have a capacity each of 200 gal-

ions per minute and a lift of 600 pounds, will be driven by a 50 horse-power direct current Crocker-Wheeler motor. The pumps are new on the market, having been invented by R. H. Aldrich of the Allentown mills.

The Cincinnati Punch & Shear Company, Cincinnati, Ohio, whose plant is at 1424 Plum street, are looking for a site to erect a new plant. During the past year the business of the company has increased to such an extent that their present quarters have become too small for the business. The company employ 30 men.

Power presses, &c., are required by the Hatheway Mfg. Company, Bridgeport, Conn., for the new plant they are to erect on a site recently purchased. The building will be L shaped, 140 x 140 feet, and about 40 feet wide, one story, of brick. Power will be furnished by a 50 horse-power engine and boiler. The company manufacture specialties in sheet metal and wire goods, and dies, tools, &c.

The report that John C. Fish and Edwin Mansfield of Shelby, Ohio, have purchased the business of the Brightman Mfg. Company of Millersburg, Ohio, is incorrect. The report probably emanated from the fact that the Brightman Mfg. Company, manufacturers of shafting machinery, are to move their plant from Millersburg to Shelby about April 1, where they will occupy the former plant of the American Bicycle Company, at the junction of the Big Four and Baltimore & Ohio railroads. The plant covers 4 acres, the buildings of which are of brick, well fitted up, and contain all the power transmitting machinery necessary to operate the factory, as well as 500 horse-power of engines and boilers. The capital stock of the company will be increased to \$250,000, fully paid up, and the officers will be: L. H. Brightman, president; G. F. Brightman, vice-president; C. W. Brightman, secretary and treasurer.

The Horseburg Forging Company of Cleveland, Ohio, have incorporated with \$25,000 capital stock, and will engage in the production of forgings. Incorporators: Robert Horseburg, J. H. Horseburg, Hugh E. Payne and Fielder Sanders.

The Standard Engineering Company, now building a plant at Ellwood City, Pa., have called a special meeting of the stockholders, to be held in Pittsburgh on March 12, for the purpose of increasing the capital stock from \$200,000 to \$300,000.

#### Power Plant Equipment.

The Empire Electric Company, Franklinville, N. Y., who recently purchased the plant of the Electric Light Company, will install a new engine and dynamo, but have not yet decided on the make of either. R. O. Williams is secretary.

The Triumph Electric Company, Cincinnati, Ohio, have secured an order from the Standard Rock Candy Company of New York City for 30 motors and generators ranging from 2 to 50 horse-power each.

The organization of the Avonmore Construction Company, 4221 Sherman street, Pittsburgh, Pa., has been completed, and work on the construction of the plant will commence at once. When finished this will be one of the best equipped plants in the country for the furnishing of boilers, both horizontal and water tube, together with plate iron and structural work for oil refineries, steel plants, foundries, blast furnaces and rolling mills. J. Harrison Orwig will be manager of the company.

The Water Works Trustees of Lancaster, Ohio, will receive bids until March 25 for furnishing cast iron pipe and special castings, building pump and power house, drilling eight 6-inch wells, furnishing and installing one gas engine and one power pump. Plans and specifications will be furnished upon application to George Cunningham, secretary.

The Southern Engine & Boiler Works, Jackson, Tenn., are about erecting another foundry, 80 x 120 feet. It will be equipped with traveling crane and the other necessary machinery will be of the most improved character. Their new machine shop was finished and started the first of the year. Its equipment includes some of the largest planers, lathes and other machines in use, among which is a pit lathe to turn and bore 30 feet in diameter with 6-foot face. They are shipping large outfits almost daily for cotton roller and saw mills and also cotton gins.

The Macbeth Iron Company, Cleveland, Ohio, are installing two blowing engines at the plant of the Scottdale Furnace Company, Scottdale, Pa. The engines have a 42-inch steam cylinder with piston valve, 84-inch air cylinder with poppet valves and common stroke of 54 inches. The weight of each engine is about 125 tons.

The Cleveland Hardware Company, Cleveland, Ohio, are installing a complete electrical equipment for the operation of their plant, and have recently purchased from the Westinghouse Electric & Mfg. Company one 75-kw. and one 100-kw. two-phase alternators, together with exciters, switchboard, ten 20 horse-power motors and two 10 horse-power motors. The Great Northern Portland Cement Company of Detroit will equip their plant throughout with electrical apparatus, and have purchased from the Westinghouse Company 23 direct current motors, ranging in size from 5 to 50 horse-power.

The Bessemer Gas Engine Company, Incorporated, Grove City, Pa., manufacturers of Bessemer gas engines and Bessemer gas cylinders for steam engine beds, have recently qualified in Ohio, but have had a branch office in Lima, Ohio, for the past

three years which has been doing a very nice business. They are increasing their plant at Grove City by the addition of 100 x 100 feet to the foundry and an addition of 50 x 200 feet to the machine shop. They have also bought several new machines of large size. The demand for their larger sizes of gas engines necessitated an increase in output, and the company are crowded with orders and regard the outlook for business as very bright. The officers are John Carruthers, president; Arthur Hull, vice-president; Mark W. Graham, secretary, and Edward Fithian, treasurer.

#### Foundries.

The Gehring-Stephens Mfg. Company of Pittsburgh recently received a charter and will operate a plant at First avenue and Ferry street, in that city, in the manufacture of all kinds of steel and iron castings, and will do various kinds of machine work and pipe fitting.

The Water Works Trustees of Youngstown, Ohio, are in the market for the following items of cast iron water pipe, which aggregate about 600 tons: Twenty thousand feet of 8-inch, 45 pounds per foot; 6000 feet of 6-inch, 33 pounds per foot; 1000 feet of 12-inch, 85 pounds per foot; 300 feet of 4-inch, 22 pounds per foot. They also want about 15 tons of special castings and about 10 tons of soft pig lead.

The Sharon Foundry Company will start up their large and modern foundry plant, which is located at Wheatland, below South Sharon, about May 1.

The Crown Casting Company, Jackson, Ohio, manufacturers of soil pipe and fittings, have increased their capital stock from \$50,000 to \$100,000, and will add stove manufacturing to their business. The company will erect a foundry and a number of new buildings, in order to accommodate the stove department and their growing trade in other lines. They occupy a ground space of 6½ acres, and have communication with the three railroads entering Jackson. It is stated that they now have sufficient orders on their books to keep them busy for the next six months.

The United States Cast Iron Pipe & Foundry Company, at Pittsburgh, have taken a contract for furnishing pipe to take water to Dubois, Pa., from Anderson Creek. The contract amounts to \$66,491.50, and the pipe is to be delivered by July 15, delivery to commence on April 15.

#### Bridges and Buildings.

N. Westover & Co., manufacturers of bridge and building iron work, Lincoln, Neb., are enlarging their plant and installing additional machinery, which it is estimated will double the previous output of their shops. The company have been operating steadily since August 17, 1876, and since 1888 have been manufacturing building iron on a small scale. Previous to that time attention had been largely given to general blacksmithing. Among the tools which are being installed are automatic compressors, compressed air riveters and power punches.

The Donovan Wire & Iron Company of Toledo, Ohio, have been incorporated with \$100,000 capital stock by D. C. Donovan, M. J. Donovan, Matthew Donovan, George Ganss and Charles Roehl. They absorb the partnership heretofore known as the Donovan Wire & Iron Works. They have commenced work on a large plant on the Wheeling & Lake Erie Railway in Toledo, and this plant will be used for the manufacture of structural iron and steel, while the old plant on Water street will be retained for the manufacture of boilers and ornamental iron. They are placing contracts for considerable new machinery for their new plant.

The Dravo Contracting Company, general contractors, Lewis Block, Pittsburgh, have received a contract from the Pittsburgh & Lake Erie Railroad for the building of a boiler shop, 100 x 275 feet, and a blacksmith shop, 70 x 197 feet. Work on these buildings is to be started at once.

#### Fires.

The plant of the American Mfg. Company, Erie, Pa., was recently destroyed by fire. The loss is about \$40,000.

Fire at Grand Marais, Mich., March 1, destroyed the Marais Company's saw mill, the village water works and the light station. The loss is estimated at \$50,000.

The Cooper-Wells Knitting Works, St. Joseph, Mo., were destroyed by fire February 25, entailing a loss of about \$200,000.

The malleable iron foundry of the Southern Car & Foundry Company, at Anniston, Ala., was recently destroyed by fire.

The plant of the Edison Portland Cement Company, at New Village, near Stewartsville, N. J., was wrecked by an explosion March 2.

The plant of the Olive Stove Company, Rochester, Pa., was demolished by an explosion of gas March 3. The loss is placed at \$50,000.

#### Hardware.

The Hess Spring & Axle Company, Carthage, Ohio, have just completed the erection of a new building especially adapted to the construction of their "naked" or "bike" axles. They remark that they are among the largest manufacturers in the world of this class of work, but that they have facilities for the production of anything in this line that may be called for.

The Carroll Mfg. Company, Peoria, Ill., have been organized



with a capital stock of \$50,000 under the laws of Illinois. The company have been formed to manufacture fence wire under the patents of F. C. Carroll and woven wire fence. It has not as yet been decided where the factory will be located. The company are seeking a reliable, energetic, practical wire manufacturer to take the position of superintendent of the factory.

The Globe Specialty Company, Marietta, Ohio, have been incorporated by Charles Morrow and W. C. Gage of Byesville and W. H. Etter, M. H. Etter and G. W. Strecker of Marietta. They have purchased the factory of the Buckeye Novelty Company of that city and will engage in the manufacture of hardware specialties of various kinds. Considerable new machinery will be installed and a department for nickel plating will be added.

The Improved Mop Wringer Company have been incorporated at Buffalo, N. Y., to manufacture improved mops and other patent devices and specialties. The capital stock is \$9000.

#### Miscellaneous.

The Schill Brothers Company, Crestline, Ohio, manufacturers of furnaces, stoves and ranges, have increased their capital stock from \$100,000 to \$250,000 and will make extensive enlargements to their works.

At a meeting of the stockholders of the Union Iron Works, San Francisco, Cal., the following directors were elected: Henry T. Scott, Irving M. Scott, W. G. Dodd, P. N. Lillenthal, F. W. Zelle, Lewis Nixon and Max Pam. Subsequently the Board of Directors organized by the election of the following officers: Chairman of the board, Henry T. Scott; president, W. G. Dodd; secretary and treasurer, Charles N. Champlon. Some changes were made in the directors to harmonize with the organization of the United States Shipbuilding Company. Henry T. Scott will continue as the executive and financial head of the organization, while Irving M. Scott will be elected the California director of the United States Shipbuilding Company.

There is considerable scarcity of skilled labor in the Pittsburgh district, and recently the H. P. Porter Company of that city, builders of light locomotives, inserted advertisements in Philadelphia papers for machinists, being unable to secure enough men in Pittsburgh.

The Pennsylvania Railroad have ordered 500 40-foot steel gondolas of 100,000 pounds capacity, with 45-inch sides and drop bottom, from the American Car & Foundry Company.

J. Bishop & Co., manufacturers of platinum ware, whose plant at Sugartown, Pa., was recently destroyed by fire, have moved their works to Malvern, Pa., where they will be permanently located, and with improved facilities will be better equipped than ever to meet the demands of the trade.

The Phoenix Cotton Oil Company, Memphis, Tenn., will erect a 60-ton cottonseed oil mill at Walnut Ridge, Ark. The engines, boilers and most of the machinery have been purchased.

The Empire Plow Company, Cleveland, Ohio, who recently purchased the Ensley Plow Works, at Ensley, Ala., will erect additional buildings and put in a complete outfit of up to date machinery, making it one of the best equipped and most modern plow plants in the country. They will be ready for the next season's business.

Riggs & Brother, Philadelphia, Pa., manufacturers of compensating binnacles, chronometers and nautical instruments, report a very prosperous year and a bright outlook for the ensuing one. The firm have been enlarged by taking into partnership the three sons of the senior members of the firm: Robert S. R. Judson and Clarence Riggs.

Realizing the benefits to be derived from the placing of several small plants under one management, in the way of economy of manufacture, the Wakefield Fire Brick Company, Cecil Fire Brick Company of North East, Md., and the North East plant of the Rutland Fire Clay Company of Rutland, Vt., have consolidated as the United Fire Brick Company, with a capital stock of \$40,000. It is probable that the Green Hill Fire Brick Company of North East will also be taken into the merger. The new company will carry a larger stock than heretofore, and will be in a position to make more prompt shipments.

A company to manufacture oil burners for ranges and heaters have been organized at Buffalo, N. Y., and arrangements are being made for a factory. The inventor of the burners, Wm. R. Smith, of Boston, will be president of the company.

The Remington Motor Vehicle Company, Utica, N. Y., recently incorporated, have purchased the plant and business of the Remington Automobile & Motor Company, and will continue the manufacture of automobiles, motors for launches, &c. William H. Owen will be general manager.

The Pressed Steel Car Company of Pittsburgh have received an order from the Etna & Vesuvius Coal Company for 16 flat bottom gondola cars with twin hoppers of 80,000 pounds capacity each. The same company have received an order from the Raritan River Railroad Company for six low side gondola cars of 80,000 pounds capacity each.

The business of Victor Stamping Company, Cincinnati, Ohio, has increased to such an extent that the officials are now looking for more commodious quarters where they can increase their output and have switching facilities.

G. N. Henson, Chattanooga, Tenn., is in the market for up-

right storage tanks, holding from 100 to 2000 barrels, also for iron, steel or pipe water tower 45 to 60 feet high with tank holding 14,000 to 25,000 gallons. Second-hand tanks or tower could be used, the price being satisfactory.

The new buildings of the Harrisburg Pipe & Pipe Bending Works, Harrisburg, Pa., will be completed by April 1. The company hoped to get into them by the middle of March, but severe winter weather prevented. The company have received a supply of skelp, which will enable them to operate their mills full force.

The American Road Machine Company of Kennett Square, Pa., are building a railroad to connect the various buildings of the plant, to be used in handling heavy castings and fuel.

The Hammond Iron Works, at Warren, Pa., have booked a \$250,000 order for the United Coke & Gas Company, with offices in New York City. The contract calls for the erection of a plant for the manufacture of coke and gas, and of the by-products of coal tar and ammonia. The Hammond Company have subcontracted with the Lackawanna Steel Company of Buffalo to furnish a portion of the steel. The Hammond Company's business has increased so rapidly that a new building has been found necessary, and the foundations for this are now being laid.

At a meeting of the Kinnear Mfg. Company of Warren, Pa., it was decided to resume operations at the company's plant, after a shutdown of some months. The company manufacture the Martindale self measuring oil tank and the Martindale acetylene gas generator.

## The United States Steel Corporation's Improvements.

At a meeting of the Board of Directors of the United States Steel Corporation, held after the close of business March 3, the plans in connection with carrying into effect the bond conversion project, which provides for the issue of \$200,000,000 of 5 per cent. bonds to replace a similar amount of 7 per cent. preferred stock, and \$50,000,000 additional bonds, the proceeds of which will be used for extensions, improvements, &c., was approved. According to the statement made public after meeting, something like \$36,000,000 will be expended in betterments and additions during the current year. This is about \$10,000,000 in excess of the amount originally proposed.

When the improvements shall have been completed there will have been added to the subsidiary companies a total capacity of 2,700,000 tons of all products. Under normal conditions, it is estimated by the management that the increased earnings from this increase in capacity will be about \$7,000,000 a year, and that there will be a saving in manufacture of about \$5,000,000 a year, or a total of not far from \$12,000,000 a year added to the profits of the various subsidiary companies. Practically all the subsidiary companies are included in the plan of extensions and improvements, and the sums allotted to each range from a few thousand dollars to \$10,000,000. The improvements at McKeesport, Pa., and Lorain, Ohio, will cost in the neighborhood of \$20,000,000, and the American Steel & Wire Company will receive about \$5,000,000.

No mention is made of the Union Steel Company, the latest acquisition of the Steel Corporation, although it was officially stated that improvements contemplated there would make that plant one of the largest and most important in the world. The capacity of the Sharon Steel Company, it is understood, will be increased by at least 50 per cent., if the present plans of the corporation shall be carried out.

After the meeting, Judge E. H. Gary, chairman of the Executive Committee of the United States Steel Corporation, gave out the following statement:

The plans, which have been under careful consideration and preparation for over a year, for harmonizing, extending and rounding out the various plants, will now be pushed forward with all possible dispatch. The presidents of the various subsidiary companies, who have been in session here this week, have given their final approval to these plans, which are as follows:

**Illinois Steel Company, at South Chicago.**—Construction of a new open hearth furnace plant, blooming mill and finishing mill, at an estimated cost of \$3,000,000. This plant will increase the output about 300,000 tons of structural steel, billets and plates a year. Remodeling



the 132-inch plate mill train at an estimated cost of \$650,000. This improvement will increase the tonnage of plates about 70,000 tons a year. Additional heating capacity at the rail mill, at an estimated cost of \$200,000. Improvement of the Bessemer department, at an estimated cost of \$150,000. This improvement will increase the product about 10,000 tons a year. New blast furnace blowing engines, at an estimated cost of \$475,000. This improvement is installed in order to increase the capacity, and this will be accomplished to the extent of about 120,000 tons a year. For repairing stoves at furnaces No. 1 to No. 4, at an estimated cost of \$400,000. Addition to machine shop and foundry, at an estimated cost of \$200,000.

*Illinois Steel Company, at Joliet.*—Remodeling blast furnaces Nos. 1 and 2, at an estimated cost of \$900,000. The improvement contemplates modernizing these furnaces, in order to effect a saving in cost of manufacture of pig iron, as well as to increase the production. Addition to the converting mill, at an estimated cost of \$150,000. This improvement, it is estimated, will increase the capacity at least 60,000 tons a year, and will effect a saving in cost of operation. Sundry improvements of lesser magnitude have been authorized at South Chicago and Joliet, at an estimated expenditure of \$420,000.

*National Tube Company, at McKeesport, Pa.*—The entire rebuilding of the present rolling mills and tube and pipe mills, together with the addition of one new blast furnace, an additional Bessemer converter, and the installation of a new water and power plant, all at an estimated cost of \$9,255,662. This improvement will increase the production at this plant of pig iron 166,000 tons per annum, Bessemer ingots 140,000 tons per annum, of the rolling mills 124,000 tons, and of the tube and pipe mills 100,000 tons. The increased earnings which will result from the additional capacity, it is estimated, will be \$1,533,000 per annum, and a saving will be effected, in cost of production, of \$1,805,000 per annum.

*At Lorain, Ohio.*—The erection of two additional blast furnaces with accessory works, additional rolling mills and a new tube and pipe mill; all at an estimated cost of \$8,646,096. These improvements will increase the annual production of pig iron 347,000 tons; of rolling mills 330,000 tons, and of the tube and pipe mills 300,000 tons. The increase due to additional production, it is estimated, will be \$1,089,000, while the saving in cost of producing pipe, as compared with the production of an equivalent tonnage at other mills of the National Tube Company, which will be displaced by this improvement, will be equal to \$1,500,000, a total gain in earnings of \$3,309,000. In addition, appropriations were authorized for the National Tube Company for sundry improvements in their Pennsylvania department, at Pittsburgh, and the Riverside department, in Wheeling, W. Va., aggregating \$332,400. The increased capacity which will result from these improvements should produce additional earnings of \$70,000, and the saving of \$107,000, a total gain of \$177,000 per annum.

*American Steel & Wire Company.*—Improvements at the Newburgh Steel Works, Consolidated Works, American Works, Central Works, Emma Furnace and at the Central Furnace Docks in the Cleveland district; at Shoenburger Works, Rankin Works, Edith Furnace, Neville Furnaces, in the Pittsburgh district; at Waukegan, De Kalb, Rockdale, Scott street and American Works, in the Chicago district, and in Worcester (Mass.) Works and Allentown (Pa.) Works, to the aggregate amount of \$4,535,000. The improvements when completed should effect a saving of \$1,236,000 per annum.

*American Sheet Steel Company.*—The rebuilding with modern equipment and buildings of the Canal Dover plant, in Ohio; an addition to the polishing department of the Wellsville plant; the improvement of McKeesport Works at McKeesport, Pa.; the erection and installation at Vandergrift Works of improved and modern operating methods—all at an estimated cost of \$350,000. These improvements will increase the capacity about 44,000 tons per annum.

*Carnegie Steel Company, Homestead, Pa.*—The erection of an additional 140-inch plate mill; the improvement

of the 32-inch mill, and of the boiler plant; all at an estimated cost of \$1,135,000. These improvements should increase the tonnage 260,000 tons per annum, and increase the earnings about \$1,440,000 per annum.

*Edgar Thomson Works, Braddock, Pa.*—Addition to steel and iron foundry and installation of new and modern blowing engines, at an estimated cost of \$275,000. This improvement, it is estimated, will increase the capacity about 116,000 tons per annum, and the earning capacity about \$280,000 per annum.

*Duquesne Works, Munhall, Pa.*—Additions and improvements to existing plants, at an estimated cost of \$330,000.

*National Steel Company.*—Additions and improvements to plants at New Castle, Pa., Bellaire and Youngstown, Ohio, all at an estimated cost of \$1,592,000. These improvements will increase the earnings, it is estimated, about \$315,000 per annum.

*American Steel Hoop Company.*—Additions and improvements at Isabella Furnace, Pittsburgh, and at the Upper Mills, Youngstown, Ohio, all at an estimated cost of \$285,000. These improvements will increase the capacity about 2500 tons a month.

*American Tin Plate Company.*—The installation at various of their mills of modern and improved methods of operation, at an estimated cost of \$1,000,000. This improvement contemplates the installation of recently developed methods of manufacture of tin plate.

*H. C. Frick Coke Company.*—The development of coke and steam coal properties, including the erection of additional ovens, all at an estimated cost of \$445,000. This improvement will increase the productive capacity of coke 275,000 tons per annum, and of steam coal, 600,000 tons per annum.

*Mining Companies.*—The erection of a crusher plant at Escanaba, Mich., at an estimated cost of \$143,810, with an annual capacity for crushing 510,000 tons of ore; also the erection of additional power houses, shafts and mining plants on the Vermilion, Gogebic and Menominee ranges, at an estimated cost of \$317,000.

*Transportation Properties.*—Duluth, Mesaba & Northern Railway, additional locomotives, the extension of the ore dock at Duluth and sundry improvements in the shops, all at an estimated cost of \$548,961. Duluth & Iron Range Railroad, sundry improvements to shops, bridges and line of road, at an estimated cost of \$187,000. Chicago, Lake Shore & Western Railway, additional steel cars to cost \$300,000. Pittsburgh Steamship Company, the installation of steam towing machines on bridges and alterations to the fleet at an estimated cost of \$208,000. Pittsburgh & Conneaut Dock Company, improvement of unloading machines to cost \$40,000.

On Saturday, February 28, the affairs of the Sharon Steel Company, at Sharon, Pa., were wound up, and on March 1 the United States Steel Corporation took full charge of the offices and mills of the former concern. The passing out of existence of the Sharon Steel Company was the occasion for a banquet given by the officials in the new annex of the offices there.

Plans for the consolidation of the Fisher Book Typewriter Company of Cleveland, Ohio, and the Elliott & Hatch Typewriter Company of New York are under consideration. The new company will have a capital of \$10,000,000 and the entire monopoly of the field. The present capital of the combining companies is \$1,000,000 each. The new stock has already been subscribed for by the present stockholders and will not be offered to the public. Ex-Senator Donald Cameron of Pennsylvania will be the president and Hiram J. Halle of Cleveland, Ohio, will have the entire management of the new concern.

The reported merger of the Mackie Steel Tube Mfg. Company of Hammond, Ind., with the Clifton Mfg. Company of Buffalo, N. Y., is confirmed, the combination having been effected March 2. Details of the consolidation are withheld temporarily. It is announced, however, that the Mackie Company will triple their present capacity, and that the Western trade will be supplied from Chicago and the Eastern territory from Buffalo.

## The Iron and Metal Trades.

The advent of March brings with it numerous indications of improving trade. Inquiries are increasing and a larger volume of business is noted in almost every branch of the Iron trade from old material to the most highly finished products. A special feature of the week was the large business in Steel Rails. Orders have been placed at Pittsburgh for about 100,000 tons which includes considerable tonnage from suburban electric lines, an element now becoming an important factor in the Rail trade. Both Pittsburgh and Chicago report sales of round lots of Bessemer Pig Iron to the malleable foundrymen. Billets are wanted in large quantities, but consumers have difficulty in finding Steel makers to handle the business thus offered them.

Last week an advance of \$2 per ton was noted in Wire products. This week the American Tin Plate Company follows in the partial restoration of prices reduced last fall, announcing an advance of 20c. per box, or \$4 per ton. The stiffening of prices on Skelp at Pittsburgh seems to foreshadow an upward movement in Merchant Pipe, and it is even intimated that Light Sheets may advance under the stimulus of the encouraging spring demand. It is of interest to note that the advance in Wire products was well received by the trade at large and that the demand has not been checked.

Quite a good tonnage has been done in foreign Basic Bessemer Billets. The demand for Steel has been steadily increasing, and as domestic makers are unable to supply the full requirements of the trade consumers are still turning to foreign sources of supply. The foreign market is strengthening, partly because of the good demand from this country, but also on account of the steadily improving conditions abroad. It is difficult now to shade \$28.50 for ordinary Bessemer Billets. Quite a good demand is also experienced for special Open Hearth Billets for importation.

A continued flow of orders for Structural Material is also reported by importing interests. Practically all American sections can now be purchased from foreign manufacturers.

A great deal more business could be done in foreign Pig Iron if prices were as low as some time since, but the market abroad has stiffened quite considerably, and foreign Foundry Irons are up from \$1 to \$1.50 per ton above the lowest price recently quoted.

The metal market has attracted more interest than usual this week by reason of the advanced prices on Copper and Tin. Copper is up to 13½c. and Tin to 30½c. per lb., New York. Spot Tin in London has advanced over £4½ per ton during the week. The movement in each case is asserted to be speculative, consumers holding aloof from the market.

## A Comparison of Prices.

Advances Over the Previous Month in Heavy Type,  
Declines in Italics.

At date, one week, one month and one year previous.

Mar. 4, Feb. 25, Feb. 4, Mar. 5.  
1903. 1903. 1903. 1902.

### PIG IRON:

Foundry Pig No. 2, Standard, Philadelphia .....	\$22.25	\$22.25	\$22.25	\$18.25
Foundry Pig No. 2, Southern, Cincinnati .....	<b>21.75</b>	21.75	21.25	15.00
Foundry Pig No. 2, Local, Chicago .....	23.00	23.00	23.00	....
Bessemer Pig, Pittsburgh .....	<b>21.85</b>	21.50	21.60	17.25
Gray Forge, Pittsburgh .....	<b>20.75</b>	20.75	20.50	16.75
Lake Superior Charcoal, Chicago .....	26.50	26.50	26.50	....

### BILLETS, RAILS, ETC.:

Steel Billets, Pittsburgh .....	<b>30.00</b>	30.00	29.50	31.00
Steel Billets, Philadelphia .....	<b>*28.00</b>	<b>*27.50</b>	<b>*27.50</b>	32.50
Steel Billets, Chicago .....	<b>*31.50</b>	<b>*30.75</b>	<b>*30.00</b>	....
Wire Rods, Pittsburgh .....	<b>36.00</b>	36.00	35.50	35.75
Steel Rails, Heavy, Eastern Mill .....	28.00	28.00	28.00	28.00

### OLD MATERIAL:

O. Steel Rails, Chicago .....	18.00	18.00	18.00	....
O. Steel Rails, Philadelphia .....	<b>21.25</b>	20.75	20.75	19.25
O. Iron Rails, Chicago .....	24.00	24.00	24.00	....
O. Iron Rails, Philadelphia .....	<b>24.50</b>	24.50	23.50	22.00
O. Car Wheels, Chicago .....	24.00	24.00	24.00	....
O. Car Wheels, Philadelphia .....	<b>24.50</b>	24.50	20.50	17.25
Heavy Steel Scrap, Pittsburgh .....	<i>20.50</i>	21.50	21.00	....
Heavy Steel Scrap, Chicago .....	<b>18.50</b>	18.50	18.00	....

### FINISHED IRON AND STEEL:

Refined Iron Bars, Philadelphia .....	1.93½	1.93½	1.93½	1.82
Common Iron Bars, Chicago .....	<b>1.86½</b>	1.85	1.77½	....
Common Iron Bars, Pittsburgh .....	1.80	1.80	1.80	1.70
Steel Bars, Tidewater .....	1.75	1.75	1.75	1.75
Steel Bars, Pittsburgh .....	1.60	1.60	1.60	1.60
Tank Plates, Tidewater .....	2.00	2.00	2.10	1.78
Tank Plates, Pittsburgh .....	1.60	1.60	1.60	1.60
Beams, Tidewater .....	1.75	1.75	1.75	1.80
Beams, Pittsburgh .....	1.60	1.60	1.60	1.70
Angles, Tidewater .....	1.75	1.75	1.75	1.75
Angles, Pittsburgh .....	1.60	1.60	1.60	1.60
Skelp, Grooved Iron, Pittsburgh .....	<b>2.00</b>	1.95	1.90	1.80
Skelp, Sheared Iron, Pittsburgh .....	<b>2.10</b>	2.05	1.95	1.85
Sheets, No. 27, Pittsburgh .....	2.60	2.60	2.65	3.00
Barb Wire, f.o.b. Pittsburgh .....	<b>2.60</b>	2.60	2.50	2.90
Wire Nails, f.o.b. Pittsburgh .....	<b>2.00</b>	2.00	1.90	2.05
Cut Nails, Mill .....	2.10	2.10	2.10	1.95

### METALS:

Copper, New York .....	<b>13.50</b>	13.00½	12.55	12.12½
Spelter, St. Louis .....	<b>4.90</b>	4.87½	4.85	4.10
Lead, New York .....	4.10	4.10	4.10	4.10
Lead, St. Louis .....	3.97½	3.97½	3.97½	4.05
Tin, New York .....	<b>30.62½</b>	29.50	28.65	25.50
Antimony, Hallett, New York .....	6.62½	6.87½	7.00	8.00
Nickel, New York .....	40.00	40.00	40.00	50.00
Tin Plate, Domestic, Bessemer, 100 pounds, New York .....	<b>3.99</b>	3.79	3.79	4.19

\* Fore'gn.

## Chicago.

FISHER BUILDING, March 4, 1903.—(By Telegraph.)

Interest during the week has centered mainly in Pig Iron and Bars. The demand for Pig Iron has been mainly for Bessemer and Basic, about 10,000 tons in the aggregate having been sold to a few large consumers for delivery during the second quarter of the year. There is still some inquiry for the third and fourth quarters, but there is little business, buyers and sellers being equally firm in their views, which are divergent. In both Bar Iron and Soft Steel Bars the month of February has been the most satisfactory month since last summer or early fall. Contracts placed have been mainly for delivery during the second quarter of the year, but some contracts have been made covering the third quarter, and in exceptional instances for even longer delivery. While the independent manufacturers of Bar Iron have failed to merge their interests, it is reported that a better understanding exists which will result in more harmony and a better maintained market for the manufactured product. It is announced that the United States Steel Corporation assumed practical control of the Union and Sharon mills on March 2. As far as Finished Steel is concerned, the last week has been productive of less new business in Structural Material, Plates, Sheets and Billets, but the mills are already overcrowded and the falling off in trade is without special significance, as it will probably be only temporary. Foreign Billets have sold at a little higher prices, several thousand tons having been contracted for at \$31.50, duty paid, delivered Chicago. Several thousand additional tons of Plates have been sold and the market has remained strong for mill shipment, but local prices have been reduced,



which has brought some little increase in business. There has been quite a good demand for Light Rails, a considerable tonnage having been placed during February and the first few days in March. Old Material has strengthened slightly and Coke has brought a little higher prices, there being a scarcity of spot fuel. The prospect is now reported favorable for the blowing in of the second Iroquois furnace. The Joliet mill of the Illinois Steel Company resumed operation on March 2.

**Pig Iron.**—The feature of the week has been the sale of 6000 tons of Standard Bessemer Iron in lots of 2000 tons each at prices ranging from \$23.50 to \$24, for delivery during the second quarter of this year. There also has been a fair inquiry for Malleable Bessemer and one contract for about 4000 tons of Basic Iron is pending. Charcoal Iron is quiet, but one sale is reported on the basis of \$27 for No. 1, deliveries extending throughout the entire calendar year. Foundry Iron has been quiet, except for single car lots for prompt delivery. There has been but little change in the general condition, the shortage of cars being still the most prominent feature. Local Foundry Iron is scarce and nominal. Southern Foundry is being held on the basis of \$18.50, Birmingham, although one or two special lots are said to be obtainable at \$18 for No. 2. Virginia Basic Iron is held a little more firmly, producer now asking 25c. advance or \$19 at the furnace, equivalent to \$18, Birmingham. There has continued to be more or less inquiry for Foundry Iron covering the third and fourth quarters of the year, but there being no disposition on the part of furnaces to make concessions and large melters being unable or unwilling to pay current prices, no transactions of moment have been effected. The following are the prices current, f.o.b. Chicago, the inside prices being for delivery during the second quarter and the outside prices for delivery during the month of March:

Lake Superior Charcoal.....	\$26.50 to \$27.50
Local Coke Foundry, No. 1.....	24.00 to 25.00
Local Coke Foundry, No. 2.....	23.00 to 24.00
Local Coke Foundry, No. 3.....	22.00 to 23.00
Local Scotch, No. 1.....	24.50 to 25.00
Ohio Strong Softeners, No. 1.....	26.30 to 27.30
Southern Silvery, according to Silicon.....	26.15 to 27.15
Southern Coke, No. 1.....	23.85 to 24.35
Southern Coke, No. 2.....	22.85 to 23.35
Southern Coke, No. 3.....	21.85 to 22.35
Southern Coke, No. 1 Soft.....	23.85 to 24.35
Southern Coke, No. 2 Soft.....	22.85 to 23.35
Foundry Forge.....	21.35 to 21.85
Southern Gray Forge.....	20.35 to 20.85
Southern Mottled.....	19.35 to 19.85
Southern Charcoal Softeners, according to Silicon.....	25.85 to 27.85
Alabama and Georgia Car Wheel.....	28.35 to 28.85
Malleable Bessemer.....	23.00 to 24.00
Standard Bessemer.....	24.00 to 24.50
Jackson County and Kentucky Silvery, 6 to 8 per cent. Silicon.....	31.30 to 32.30

**Bars.**—The month of February has been very satisfactory to producing interests, the largest manufacturers of Bar Iron having taken contracts which aggregate more than during any month since last August and show a gain of fully 100 per cent. over the tonnage placed in February a year ago. During the week several contracts of 500 to 1000 tons each have been placed on the basis of 1.85c. to 1.90c., Chicago, the inside price for specially desirable contracts, deliveries extending to July 1 and in one instance up to November, 1903. For Soft Steel Bars there has also been a good demand for small contracts ranging from several hundred to 2000 tons each, mainly for delivery between March and July 1. One large producer announces sales during the month of February double those made during February, 1902. There continues to be some inquiry for 1903-4 season, buyers being prompted to make provision for future requirements because of the difficulties in securing desired deliveries. There has also been a fair demand for foreign Bars, several hundred tons having been sold during the week on the basis of 1.85c., delivered Chicago, for delivery during the second quarter of the year. For domestic Iron the following are the prices current, f.o.b. Chicago, mill shipment: Bar Iron, 1.86½c. to 1.90c.; Soft Steel Bars, 1.76½c. to 1.86½c.; Hoops, 2.16½c. to 2.26½c.; Angles; 1.86½c. to 1.91½c., base. There has been an improved demand for shipment from local stocks and the market has remained steady, as follows: Bar Iron, 2.15c.; Soft Steel Bars, 2c. to 2.25c.; Angles, 2.50c., and Hoops, 2.40c., base, from store.

**Structural Material.**—No large contracts for Structural Material have been placed during the week, but the tonnage already booked is very heavy, and one of the largest interests are now out of the market until August 1. It is reported that 1400 tons were placed for the Allis-Chalmers new plant to be erected at Chicago, and contracts for two other local buildings of 1400 and 1000 tons each will probably be placed within the next few days. Otherwise, the market is without new features. The following are the prices at Chicago for mill shipment: Beams, Channels and Zees, 15 inches and under, 1.75c. to 1.90c.; 18 inches and over, 1.85c. to 2c.; Angles, 1.75c. to 1.90c. rates: Tees, 1.80c. to 1.90c.; Universal Plates, 2c. to 2.25c. There has been a better demand for shipment from local stock, and the market

has continued firm on the basis of the following prices: Beams and Channels, 2¼c. to 2½c.; Angles, 2.25c. to 2.50c.; Tees, 2.30c. to 2.55c., at local yards.

**Plates.**—The market has been comparatively quiet, only about 2000 tons having been placed during the week for late summer delivery. A strong tone has continued to prevail, and prices for mill shipment remain unchanged, as follows, for Chicago delivery: Tank Steel, ¼-inch and heavier, 1.75c. to 2c.; Flange, 1.85c. to 2.10c.; Marine, 2.10c. to 2.20c. From local stocks, however, prices have been reduced, but the lower prices have brought into the market larger buyers, with shipments larger than for some time past. The following are the prices current: Tank Steel, ¼-inch and heavier, 2.15c. to 2.20c.; Tank Steel, 3-16-inch, 2.25c. to 2.30c.; No. 8, 2.30c. to 2.40c.; Flange Steel, 2.40c. to 2.50c., all f.o.b. warehouse, Chicago.

**Sheets.**—A good demand has continued to be experienced for both Black and Galvanized Sheets, but the aggregate tonnage placed has been somewhat under that of a week ago. Official prices remain unchanged at 5c. above the following prices, which are being made by independent interests for mill shipment, carload lots, f.o.b. Chicago: No. 20, 2.50c. to 2.55c.; Nos. 22 and 24, 2.55c. to 2.65c.; No. 26, 2.65c. to 2.75c.; No. 27, 2.75c. to 2.85c.; No. 28, 2.85c. to 2.95c. Small lots from store continue to sell at 15c. to 20c. above mill prices. Galvanized Sheets have sold well, the market remaining steady on the basis of 75 and 10 and 5 discount for mill shipments and 75 and 5 for shipment from local store.

**Cast Pipe.**—The market has been quiet in the West, the prices asked by manufacturers being regarded as too high by most of the Western cities. There has been a moderate inquiry for seconds from railroads and mining interests. Manufacturers quote for round lots, f.o.b. Chicago, as follows: 4-inch, \$34; 6-inch, \$33, and 8-inch, \$32 for Water Pipe, and \$1 per ton higher for Gas Pipe.

**Billets.**—A stronger tone has been developed, and higher prices have been obtained for foreign Steel, about 2000 tons of Belgian Bessemer Billets selling at \$31.50, duty paid, delivered at Chicago, for delivery during the second quarter of the year. Domestic Re-rolling Billets are scarce and nominal, but there has been a good demand for small lots of domestic Open Hearth Forging Billets, sales being made at \$35 to \$40, according to analysis, buyer and time of delivery.

**Merchant Pipe.**—There has been liberal specifying on previous contracts, and considerable new business has also been taken during the week. The largest interests are heavily sold for several months. There has been a renewal of competition among some of the independent mills which has resulted in some shading of the official quotations, which remain unchanged, the following discount being made on carload lots, Chicago, base, random lengths, mill shipment:

	Steel Pipe.		Guaranteed Wrought Iron.	
	Black.	Galvd.	Black.	Galvd.
Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
¼ to ¾ inch.....	66.35	56.35	63.35	53.35
¾ inch.....	68.35	58.35	65.35	55.35
¾ to 6 inches.....	73.35	63.35	70.35	60.35
7 to 12 inches.....	71.35	61.35	68.35	58.35

Less than carloads, 12½ per cent. advance.

**Boiler Tubes.**—There has been an improved demand for nearby shipment and later delivery also, the great difficulty being experienced in making shipments promptly on orders already placed. Prices for carload lots remain firm as follows, at Chicago:

	Steel.	Iron.
1 to 1½ inches.....	43.35	38.35
1½ to 2½ inches.....	55.85	35.85
2½ to 5 inches.....	60.85	45.85
6 inches and larger.....	55.85	35.85

Less than carloads, 12½ per cent. advance.

From local stocks the demand has also improved, and the market has remained firm without essential change in the schedule of discounts, which are as follows:

	Steel.	Iron.
1 to 1½ inches.....	35	35
1½ to 2½ inches.....	47½	32½
2½ to 5 inches.....	55	42½
6 inches and larger.....	47½	..

**Merchant Steel.**—The general features have not changed essentially, there being but little new business offering but liberal specifying on old contracts. Tool Steel is in active demand. A firm tone has continued to prevail, prices for mill shipment being as follows: Smooth Finished Machinery Steel, 2.01½c. to 2.11½c.; Smooth Finished Tire, 1.96½c. to 2.11½c.; Open Hearth Spring Steel, 2.66½c. to 2.76½c.; Toe Calk, 2.31½c. to 2.46½c.; Sleigh Shoe, 1.86½c. to 1.96½c.; Cutter Shoe, 2.41½c. to 2.61½c. Ordinary grades of Crucible Tool Steel are quoted at 6½c. to 8c. for mill shipments; Specials, 12c. upward.

**Rails and Track Supplies.**—There has continued to be an active inquiry for both Standard and Light Sections, local mills disposing quickly of the current make during the month of February, aggregating about 6000 tons. Sales were also made during the week of about 1500 tons of Light Sections for delivery during March. About 10,000 tons of



foreign Rails, Standard Sections, are under negotiations. A strong tone has continued to prevail, of course, and prices are unchanged at \$28 for Standard and \$27 for second quality, mill shipments. Light Rails continue to sell on the basis of \$35 to \$40, according to weight, with premiums obtained for small lots for prompt shipment. Track Supplies have continued to sell well at full prices. The following are the prices current: Splice Bars or Angle Bars, 2c.; Spikes, 2.50c.; Track Bolts, with Hexagon Nuts, 3.10c. to 3.25c.; Square Nuts, 2.95c. to 3.10c.

**Old Material.**—A firmer and more confident tone has prevailed, with a good demand for Turnings, Borings, Stove Plate and Cast Scrap. There has been only a moderate demand for Rails and Car Wheels, but several hundred tons have been sold on the basis of quotations for prompt delivery. The following are the prices current per gross ton, Chicago:

Old Iron Rails.....	\$24.00 to \$24.50
Old Steel Rails, mixed lengths.....	18.00 to 18.50
Old Steel Rails, long lengths.....	23.00 to 23.50
Heavy Relaying Rails.....	31.00 to 31.50
Old Car Wheels.....	24.00 to 24.50
Heavy Melting Steel Scrap.....	18.50 to 19.00
Mixed Steel.....	15.50 to 16.00

The following quotations are per net ton:

Iron Fish Plates.....	\$21.00 to \$22.00
Iron Car Axles.....	24.50 to 25.00
Steel Car Axles.....	23.50 to 24.00
No. 1 Railroad Wrought.....	19.50 to 20.00
No. 2 Railroad Wrought.....	17.50 to 18.00
Shafting.....	20.00 to 21.00
No. 1 Dealers' Forge.....	16.00 to 16.50
No. 1 Bushing and Wrought Pipe.....	14.00 to 14.50
Iron Axle Turnings.....	14.00 to 14.50
Soft Steel Axle Turnings.....	14.50 to 14.75
Machine Shop Turnings.....	13.50 to 14.00
Cast Borings.....	10.00 to 10.50
Mixed Borings, &c.....	10.50 to 11.50
No. 1 BOLLERS, cut.....	14.50 to 15.00
Heavy Cast Scrap.....	18.00 to 18.50
Stove Plate and Light Cast Scrap.....	13.50 to 14.00
Railroad Malleable.....	16.25 to 16.50
Agricultural Malleable.....	15.50 to 16.00

**Metals.**—Copper has continued strong, and prices are still tending upward, but the demand has been checked somewhat by the higher prices prevailing. Lake is held at 13c. in carload lots and 13¼c. in a jobbing way. Pig Lead has remained firm, with a fair demand. The scarcity of cars is interfering seriously with shipments upon previous orders. Sales continue to be made on the basis of 4.05c. in 50-ton lots, 4.07½c. in carload lots and 4.10c. in a jobbing way. Spelter has been in good demand at the recent advance of 4.90c., Chicago, for Slabs. Sheet Zinc has continued in good demand and firm at 6¼c. in lots of 600 lbs. and over. Old Copper has met with a better demand, and the market has remained strong, in sympathy with primary markets. Heavy Cut Copper sells at 11¼c.; Red Brass at 11¼c.; Copper Bottoms at 10¼c.; Lead Pipe at 3.90c.; Zinc at 3.80c., spot.

**Coke.**—There has been a more ample supply of Furnace Coke, and the prospect is for one of the local furnaces which has been idle for many months to blow in the near future. But Foundry spot Coke has been scarce, and with an active demand better prices have been obtained for single carload lots. Some little business has been done for future delivery on the basis of \$5.50 at the ovens. Sales on track, Chicago, have been made at \$9.50 to \$10 for Virginia and \$10.50 for Connellsville.

## Philadelphia.

FORREST BUILDING, March 3, 1903.

Since the heavy sales reported last week business has been rather quiet; not weak by any means, but hesitating until it is seen what effect the recent heavy purchases will have. Meanwhile makers of Pig Iron are well sold up, but as a rule they are not confident enough to ask more money on new business. They are just simply waiting to see what the next move will be, taking such business as comes along at last week's prices, but make no effort to increase sales beyond what buyers ask for. The tone of the market could therefore be easily strengthened by a little extra buying, while it would not be likely to suffer much even if inactivity prevailed for a while longer. The general trend of events, however, has been toward improvement. Dearer fuel, higher freights and other additions to cost of production, are certainly against a decline, while higher prices abroad and prospects for an increased volume of business in this country ought to be a stimulus to somewhat better prices, and this in all probability will be the ultimate outcome.

**Pig Iron.**—Foundry grades remain at about the same figures as last week. The demand is fair, not particularly urgent, but sufficient to absorb most of the output. Sales of Gray Forge Iron have been rather large, and some of the best brands for foundry purposes have also been well taken, but it cannot be said that there is any distinct change in prices. Some are inclined to extreme firmness for deliveries inside of the next 60 or 90 days, while others are equally willing to make concessions for deliveries extending well through the year. But the situation is not definitely settled, although

there is no doubt that there is less fear of a decline than there was some time ago, and as there is a considerable amount of old business to complete, besides a fair amount of new, makers of Pig Iron are in a good condition to wait a movement, which may occur at almost any time now. There is not much doing in foreign Iron. New business through first hands would have to be done at a cost of \$1 to \$1.50 more money, and as consumers are not ready to pay any advance like that, matters are allowed to rest until there is more of a margin to work on than there is at present. There is a good deal of Iron to come forward, however, but as it is mostly sold to arrive, it makes no great difference anyway. Prices are somewhat varied, but as a rule the average would be about as follows, delivered buyers' yards, Philadelphia, or at points equivalent thereto:

No. 1 X Foundry.....	\$23.50 to \$24.50
No. 2 X Foundry.....	22.25 to 22.50
No. 2 Plain.....	21.50 to 22.00
Gray Forge.....	19.50 to 20.50
Basic.....	20.00 to 20.50
Middlesbrough, No. 3.....	21.00 to 21.50
Scotch.....	22.50 to 23.50

Cargo lots c.i.f.

Low Phosphorus.....	21.50 to 22.00
Bessemer.....	20.25 to 20.50
Middlesbrough, No. 3.....	18.50 to 18.75

**Billets.**—It is a most difficult market to quote. A great deal of Steel is wanted, but requirements are so diversified that quotations without specifications are of little value. Basic Bessemer German Steel, however, is quoted at about \$28, c.i.f., duty paid, but on firm offers for cargo lots better could probably be done, but a good deal would depend on deliveries. American Steel would bring \$32.50 to \$35, delivered in buyers' yards, but, as already stated, a great deal depends on what is wanted and when deliveries have to be made.

**Plates.**—There is a good demand, and although the mills are getting better facilities as regards coal and transportation, they are not making much headway against the accumulations of old orders. New business is not particularly heavy, but the day to day demand from the smaller consumers is a noteworthy feature and indicates very satisfactory conditions in general business. Of course many large orders are on the books, so that there is every reason to expect great activity during the spring and summer months. Prices are unchanged, as follows, for Philadelphia delivery or its equivalent, viz.: Small lots, 2.10c.; carload lots, ¼-inch and thicker, 2c. to 2.05c.; Universals, 2c. to 2.05c.; Flange, 2.10c. to 2.20c.; Fire Box, 2.25c. to 2.30c.; Marine, 2.30c. to 2.35c.

**Bars.**—Business is fairly active, but in some cases specifications are not as promptly given as could be desired, so that, although orders are on the books, work in the mills is retarded by the delay in specifying. Prospects are favorably regarded, however, and it is believed that the spring and summer months will develop considerable activity, and it is hoped somewhat better prices, which for the present are unchanged, as follows: Steel Bars at 1.73½c., base; spot deliveries local mills get special rates, say 1.85c. to 1.90c. Refined Iron, as before, is quoted at 1.93½c. to 1.95c., carload lots, minimum quantities.

**Structural Material.**—There is nothing new in this department, business being fairly active, but not enough to cause any marked scarcity of material. Specifications have been rather slow, but apart from that things are in satisfactory condition, and prospects favorable for a heavy business soon, as outside work can be carried on without danger of interruption. Prices are firm and unchanged as last quoted—viz., Philadelphia delivery: Beams, Angles or Channels, ordinary sizes, 1.73½c. to 1.78½c., carload lots, as a minimum.

**Sheets.**—The volume of business is improving, and prices average about a tenth higher than last week. The outlook indicates an active demand in the near future, and possibly somewhat higher prices.

**Old Material.**—There is a good demand for everything, and prices are very strong and in most lines material brings an advance on last week's figures. Bids and offers are about as follows for delivery in buyers' yards:

Old Steel Rails.....	\$21.25 to \$21.75
Heavy Steel Scrap.....	20.75 to 21.50
Low Phosphorus Scrap.....	27.00 to 28.00
Old Steel Axles.....	26.00 to 27.00
Old Iron Rails.....	24.50 to 25.00
Old Iron Axles.....	30.00 to 31.00
Old Car Wheels.....	24.50 to 25.00
Choice Scrap, R. R. No. 1 Wrought.....	23.50 to 24.00
Country Scrap.....	21.00 to 22.00
Machinery Scrap.....	20.00 to 21.00
No. 2 Light Scrap.....	18.00 to 19.00
No. 2 Light (Ordinary).....	15.00 to 16.00
Wrought Turnings.....	16.50 to 17.50
Wrought Turnings, Choice Heavy.....	17.50 to 18.00
Cast Borings.....	11.00 to 11.50
Stove Plate.....	15.00 to 16.00

Frank Samuel of Philadelphia has been appointed sole agent in the United States for the Birnsdale Smelting Company of Middlesboro, England. This company are well-

known manufacturers of Ferro Silicon, Ferromanganese and Spiegeleisen.

N. Lilienberg has opened an office in the Betz Building, room 1007, Philadelphia, and will have the sole agency in the United States for the well-known firm of Carl Setterwall & Co. of Stockholm, Sweden, whose brands of Iron and Steel are most favorably known to the trade, both here and in Europe.

Justice Cox, Jr., & Co., Limited, Philadelphia, have opened offices at 156-158 Broadway, New York, which will be in charge of Tallmadge Delafield, long identified with the Iron and Steel business in New York City.

## Cleveland.

CLEVELAND, OHIO, March 3, 1903.

**Iron Ore.**—The Ore Association is continuing its deliberations over the prices to be charged the coming season. The members of the association made the statement last night that the various Ores are being assayed now to ascertain their physical properties, so that some accurate estimate may be placed on the value of non-Bessemer Mesaba Ores. Until this matter is decided there will hardly be a final meeting, and definite action on the part of the producers will be withheld. The shipment of Ore away from the lake stock piles has been very light, as there is not a furnace that has not an ample supply. It is quite evident now that there will be a larger amount of Ore on the docks this spring than ever before. The supply will not be exhausted, to all appearances, for months. The railroads have been so situated, and are so still, that it is extremely difficult for them to move any quantity of this Ore, and this condition may possibly last well into the summer.

**Pig Iron.**—The demand for all grades is showing a better tone and shipments are not quite so badly hampered by the car or locomotive shortage, which condition also brings relief to the furnacemen. It is beginning now to look as if the worst time had passed and the producers are expecting to be able to run steadily from now on, especially as far as the lack of Coke is concerned. The demand for Basic has been perhaps the leader of the market. Consumers seem to be in a predicament as the immediate result of the lessened production during the past few months. They are now compelled to take off-Iron or anything that presents itself as a possible relief from the shortage. In addition there is a strong inquiry for material after July 1. The producers have not been quoting many prices so far and, in fact, it seems decidedly uncertain as to what the future market will be. Nothing is being sold under \$20. The Bessemer market is somewhat dull. There is very little Iron for first half delivery and what there is of it is commanding a good premium. In this practice, however, the association furnaces are not participating, largely because they have no material to speak of. There is some inquiry for material for second half delivery, but so far the sales have not been large or numerous. There is a feeling that for the present the quotation of \$21, Valley furnace, for second half delivery would be continued. Contracts by the United States Steel Corporation supposed to be pending may change all of this. The demand for Foundry Iron for spot delivery exceeds the supply. This market has been practically exhausted for some time and the other sources of production have been applied to with but little better results. Some Iron comes from the South, but not enough to meet the current demand. The improved condition of the weather inclines to relieve the situation immensely and the possibilities are that the output will be improved enough to relieve conditions materially. The general quotation now of No. 2 Foundry is \$25, Valley furnace, for spot shipment. The demand for material for first quarter delivery has continued strong and slightly in excess of the output. This price continues at \$23, Valley furnace. The buying for the second half has been very much stronger.

**Finished Iron and Steel.**—The Bar Iron situation has become ever so much stronger during the last few days with reports that some good sized sales have been made but without these being confirmed. It is generally known that the agricultural implement works have not yet made their purchases, and on this will hang the great part of the trade. They are now making inquiries. The general trade has been strong enough to warrant the belief that when the big buying starts there will be all of the trade that the mills can take care of, if indeed there is not a shortage of material. The market may now be said to have settled definitely upon the new price of 1.80c. for Bar Iron. Bar Steel sales have been heavy and the market is firm. The demand is increasing, and some good sized orders have been placed recently. The prices are still 1.60c. for Bessemer and 1.70c. for Open Hearth. The Sheet trade has been much stronger during the past few weeks, and the spring appears to be opening possibilities for trade that are encouraging. Prices have not changed, but the market is very strong and inclined upward. The base prices are still 2.85c. to 2.95c. for No. 27 Black Sheets from the smaller mills, with 3.10c. to 3.25c. out of

stock. Galvanized Sheets are still worth 3.70c. for No. 27 at the mill. The demand for Steel Rails has been surprising during the last week. There are inquiries in now for Rails enough to build about 85 miles of tracks in this immediate vicinity, which will probably be closed before the present week is out. There is something of a call for lighter Rails, but it is not up with the demand for the standard grades. The demand for Structural Steel has been somewhat greater during the past week, and the shipments are beginning to be heavy. The material for spot shipment has been more than usually scarce. This is enabling the smaller mills to get more premiums on their material, and is also giving the larger mills a good many opportunities to break away from the rock bottom prices to which they have adhered for a year or more, which some of them are doing. Quotations are 1.60c. from the larger mills; 1.75c. to 1.85c. from the smaller mills, and 2.25c. out of stock. The demand for plates has been only medium, at least as far as new orders are concerned, while the specification on old contracts has been more than ordinarily heavy. The smaller mills have continued to ask 2c. for their material at the mill, and get it. The standard mills are getting 1.60c., Pittsburgh.

**Old Material.**—There has been a better demand for material all the way through, and the market has been strong. Prices have not advanced, but it seems possible that other changes will be made soon. Quotations are as follows: No. 1 Wrought, \$19.50, net; Iron Rails, \$25.50, gross; Iron Axles, \$20, gross; Wrought Turnings, \$19.50, net; Cast Borings, \$17.50, gross; Car Wheels, \$22.50, gross; Heavy Melting Steel, \$19, gross; Old Steel Rails, \$20, gross.

## St. Louis.

CHEMICAL BUILDING, March 4, 1903.—(By Telegraph.)

**Pig Iron.**—Some increase in the inquiries and a better call for quick Iron are the principal features of the market situation at this point. Orders in amounts from 50 to 100 tons are quite common, but orders of any considerable magnitude are scarce. A disposition to anticipate the delivery of contract Iron seems to be quite general, and it is fortunate that the furnaces are now in better shape to hurry along these deliveries. The railroad rule necessitating the reloading of cars at a terminal point when transfer is made to another line is proving a hindrance, as a great many of the delays at the present time can be traced to this account. Prices are holding steady and firm. We quote, f.o.b. St. Louis, as follows:

Southern, No. 1 Foundry.....	\$23.00 to \$23.50
Southern, No. 2 Foundry.....	22.25 to 22.75
Southern, No. 3 Foundry.....	21.75 to 22.25
Southern, No. 4 Foundry.....	21.25 to 21.75
No. 1 Soft.....	22.75 to 23.25
No. 2 Soft.....	22.25 to 22.75
Gray Forge.....	21.25 to 21.75
Southern Car Wheel.....	28.75 to 29.75
Malleable Bessemer.....	24.75 to 25.25
Ohio Silvery, 8 per cent. Silicon.....	33.00 to 33.50
Ohio Strong Softeners, No. 1.....	to
Ohio Strong Softeners, No. 2.....	25.00 to 26.00

**Bars.**—The demand as reported by the jobbing trade shows advancement and it is said that a comparison with same period in other seasons makes a very satisfactory showing. We quote from the mills: Iron Bars at 1.85c. to 1.90c.; Steel Bars at 1.85c. Jobbers quote Iron Bars at 2.25c. and Steel Bars at 2.25c., in small lots from store. To some of their large trade, particularly local, quotation is named at 2.15c.

**Rails and Track Supplies.**—The active demand shows no abatement and the quantity of new inquiry coming to hand is considerable. We quote as follows: Splice Bars at 2.05c.; Bolts, with Hexagon Nuts, 3.15c. to 3.30c.; with Square Nuts, 3c. to 3.15c.; Spikes, 2.50c. to 2.60c.

**Angles and Channels.**—Jobbers give a very favorable report as to trade conditions in this department of the market, and the present demand for Small Angles and Channels compares very favorably with other seasons and in some establishments has exceeded the former figures. A very hopeful view of the future market is manifested by the trade. For material of this class 2.50c., base, is asked.

**Pig Lead.**—A better and more active demand prevails in the Pig Lead market. Prices are firm and we quote Chemical at 3.97½c. to 4c. and Desilverized at 4c.

**Spelter.**—A very good market exists for Spelter and the activity comes from substantial sources which may presage a larger improvement. Price is firm at 4.90c.

## Cincinnati.

FIFTH AND MAIN STS., March 4, 1903.—(By Telegraph.)

With the exception of some fair buying of Malleable Irons there has been almost no activity in the Pig Iron market throughout the past week. The situation well nigh resolves itself into a deadlock between buying and selling interests. A good many buyers are feeling the market and in some instances prodding pretty hard to find evidence of weakness. So far furnaces have stood these tests strongly and but little



trading has been the result. There is, however, an inclination on the part of some agents to recommend some concession in order to secure contracts, but in these cases 50c. is the limit of concession, while buyers are striking for much larger figures. While Southern No. 2 Foundry is generally held at \$18.50, Birmingham, and not openly sold or quoted at less, it is believed that a desirable customer wishing as much as 500 tons or over for last half delivery could get Iron on the basis of \$18. Perhaps this could not be verified, but there are agents here who believe their furnaces would accept the figure. Gray Forge is quotably unchanged on a minimum basis of \$16.50, Birmingham. Mottled Iron is weaker and is being offered in small lots as low as \$15.50, same basis. One sale of a few hundred tons of No. 2 Foundry is reported for last half at \$18.50, Birmingham, and the fact that it was bought by a large buyer is used as an indication of the market's strength. Freight rates from the Hanging Rock district, \$1.15, and from Birmingham to Ohio River points, \$3.25. We quote, f.o.b. Cincinnati, for delivery throughout the year, as follows:

Southern Coke, No. 1.....	\$22.25 to \$23.00
Southern Coke, No. 2.....	21.75 to 22.50
Southern Coke, No. 3.....	21.25 to 22.00
Southern Coke, No. 4.....	19.75 to 20.75
Southern Coke, No. 1 Soft.....	22.25 to 23.00
Southern Coke, No. 2 Soft.....	21.75 to 22.50
Southern Coke, Gray Forge.....	19.75 to 20.75
Southern Coke, Mottled.....	18.75 to 19.75
Ohio Silvery, No. 1.....	31.15 to 32.15
Lake Superior Coke, No. 1.....	24.15 to 25.15
Lake Superior Coke, No. 2.....	23.15 to 24.15
Lake Superior Coke, No. 3.....	22.15 to 23.15

#### Car Wheel and Malleable Irons.

Standard Southern Car Wheel.....	\$27.75 to \$28.75
Lake Superior Car Wheel and Malleable	27.50 to 28.50

**Plates and Bars.**—The general market, both wholesale and retail, is showing more activity and prices remain unchanged. We quote, f.o.b. Cincinnati, as follows: Iron Bars, in carload lots, 1.92c., with half extras; same, small lots, 2.20c., with full extras; Steel Bars, carload lots, 1.73c., with half extras; same, in small lots, 2.20c., with full extras; Plates,  $\frac{1}{4}$ -inch, in carload lots, are still nominally 1.70c.; 3-16-inch, 1.80c.; Beams and Channels, 1.70c., base.

**Old Material.**—The market is quiet on an unchanged basis. We quote dealers' buying prices, f.o.b. Cincinnati, as follows: No. 1 Wrought Iron Railroad Scrap, \$19 per net ton; Cast Scrap, \$17.50 per net ton; Iron Rails, \$22.50 per gross ton; Long Steel Rails, \$22.50 per gross ton; Short Steel Rails, \$17.50 per gross ton; Iron Axles, \$27.50 per net ton; Car Wheels, \$23, gross.

## Pittsburgh.

(By Telegraph.)

PARK BUILDING, March 4, 1903.

**Pig Iron.**—We note a heavy demand for both Basic and Malleable Bessemer Iron, and round sales of both have been made in the past week. Basic Iron is scarce, and is held at \$20.50 to \$21, at Valley furnace, for shipment up to July, while for shipment over last six months \$20, at furnace, is quoted. We note sales of about 20,000 tons of Malleable Bessemer Iron at prices ranging from \$21 for delivery in the third quarter to \$20.50, and \$20.75 for Iron for delivery in the last six months. No large lots of Standard Bessemer Pig have been sold since our last report, but the market is firm at \$21, at furnace, for Iron for shipment up to July, and \$20 to \$20.50 for shipment over the last six months. There is a much better inquiry for Forge Iron, which is somewhat scarce, and is now held firmly at \$20.75 to \$21, Pittsburgh, Pa. Valley furnaces are holding Forge at \$20.50, at furnace, equal to \$21.35, Pittsburgh, practically no Valley Forge Iron coming into this market.

**Steel.**—We note an active demand for Steel, and sales of 15,000 to 20,000 tons of Billets and Slabs are reported at \$30.50 to \$31, maker's mill. Bessemer Billets are held firmly at \$30 to \$30.50, Pittsburgh. We note a sale of about 1000 tons of 4-inch Billets at a price equal to \$30.25, Pittsburgh.

**Muck Bar.**—As high as \$35, Pittsburgh, is being offered for domestic Muck Bar, and the market is very firm at that price.

**Steel Rails.**—Within the past week the Carnegie Steel Company and the National Steel Company have entered orders for about 100,000 tons of Standard Steel Rails for railroad lines and for use on country traction lines. Quite a large tonnage of Standard Steel Rails is being used by suburban traction lines.

(By Mail.)

The Ore Association is in session in Cleveland, Ohio, today, and it is probable the schedule of Ore prices, as given in *The Iron Age* last week, will be finally adopted. The Ore movement this year promises to be the heaviest ever known, and will tax the utmost facilities of the boats and railroads to move the enormous tonnage of about 34,000,000 tons that is expected to be brought down. Under date of

February 28 the American Tin Plate Company sent out notices to the trade of an advance of 20c. a box in Tin Plate, which makes the price of ordinary Terne Plate, 14 x 20, 100 lbs., \$3.80 per box at mill. The demand for Tin Plate is referred to as being excessively heavy. The general Iron market continues in a satisfactory condition, and it would not be surprising if advances in other lines, possibly Pipe and Sheets, will be announced before long. A large tonnage of Bessemer Pig Iron is under negotiation, and may be placed before this week is out. The Steel market is active, and prices are very strong. The number of sellers of Steel is limited, and consumers are having some difficulty in getting a regular supply. Tonnage in Structural Material and Plates is extraordinarily heavy, but there will be no advance in prices, as the same conservative policy of the past on these lines will be continued by the leading interests in the future. With the possible exception of Sheets, and these are showing some improvement, the whole line of Finished Iron and Steel is extremely active. The railroad situation does not show much betterment, and shipments of Coke yesterday (Monday) were the poorest for some time. It will probably be well into the summer before there is any permanent relief in this direction. The mills and shops located along the banks of the Allegheny and Monongahela rivers were badly flooded on Saturday and Sunday, the rivers reaching a height of over 28 feet. On the Allegheny side, such plants as Park Steel Company, Carbon Steel Company and others were shut down temporarily, and on the Monongahela side, National Tube Works, American Sheet Steel Company, at McKeesport, and plants at Braddock and Rankin were seriously affected. The rivers are falling rapidly, and the idle plants will be started within a day or two.

**Ferromanganese.**—We continue to quote English Ferro at \$50 in large lots and \$52.50 in small lots. German Ferro, which is not quite so high in quality, is sold at slightly lower prices. The Carnegie Steel Company have been making Ferro for some time, but are not sellers in the open market.

**Tin Plate.**—Under date of February 28 the American Tin Plate Company, Battery Park Building, New York City, sent out notices to the trade of an advance of 20c. a box in Common Ternes, or from \$3.60 to \$3.80 per box at mill, with proportional advances for the higher grades. The reasons given for the advance are the higher cost of Coal, higher railroad freights and high price of Pig Tin, which is held at 30c. a lb. Demand for Tin Plate is reported to be exceedingly heavy and the American Tin Plate Company are operating all their plants with the exception of the Chester Works, which is closed down temporarily on account of an accident. The independent Tin Plate mills report heavy orders being placed and are booking a great deal of business. In fact, a good many of the outside Tin Plate mills got from 10c. to 20c. a box advance over prices of the American Tin Plate Company before the recent advance was made.

**Plates.**—Tonnage in Plates shows no abatement and the mills are turning down orders almost every day, on which they cannot make deliveries wanted. The output on Plates will be materially increased before long by the building of a large Plate mill at Homestead and the fixing up of the mill at Sharon to roll Plates. The Steel car companies and the boiler shops are placing heavy orders and in many cases are not able to get deliveries wanted. Plates for prompt shipment continue to command from 1.75c. up to 1.90c. at mill, but the bulk of the tonnage is sold at official prices, which are as follows: Tank Plate,  $\frac{1}{4}$ -inch thick and up to 100 inches in width, 1.60c., at mill, Pittsburgh; Flange and Boiler Steel, 1.70c.; Marine Ordinary Fire Box, American Boiler Manufacturers' Association specifications, 1.80c.; Still Bottom Steel, 1.90c.; Locomotive Fire Box, not less than 2.10c., and it ranges in prices to 3c. Plates more than 100 inches wide, 5c. extra per 100 lbs. Plates 3-16 inch in thickness, \$2 extra; gauges Nos. 7 and 8, \$3 extra; No. 9, \$5 extra. These quotations are based on carload lots, with 5c. extra for less than carload lots; terms net cash in 30 days.

**Sheets.**—A somewhat better demand is reported for both Black and Galvanized Sheets, but the capacity for making Sheets is so large that it will require a very much heavier demand before the mills will all have work. It is said the leading Sheet interest could supply the entire demand of the country, and when the large number of new Sheet mills that have been built in the past few years is recalled, it will be readily seen that it will take an extraordinary demand to keep all the mills filled up. However, with the increase in demand for other lines of Finished Iron and Steel, it seems reasonable to expect that Sheets will also improve. For desirable orders, No. 27 Black Sheets continue to be sold at about 2.60c. and No. 28 at about 2.70c., at mill. We quote: Nos. 22 and 24 Black Sheets, box annealed, one pass through cold rolls, at 2.45c.; No. 26, 2.55c.; No. 27, 2.65c., and No. 28, 2.75c. These prices are for carloads and larger lots, buyers charging the usual advances on small lots from store. On Galvanized Sheets we quote Nos. 26, 27 and 28 at 75, 10 and 2 $\frac{1}{4}$  to 75, 10 and 5 per cent. off for carloads and larger lots. In net prices these are equal to about 3.25c. for No. 26, 3.42c. for No. 27 and 3.70c. for No. 28. These prices ap-



ply only on carload and larger lots and are f.o.b. mill. On less than carloads jobbers charge the usual advances.

**Structural Material.**—No contracts of magnitude have recently been placed, but a good deal of work is in sight, and the Structural mills are filled up for months ahead. We quote: Beams and Channels up to 15-inch, 1.60c.; over 15-inch, 1.70c.; Angles, 3 x 2 up to 6 x 6, 1.60c.; Zees, 1.60c.; Tees, 1.65c.; Steel Bars, 1.60c., half extras, at mill; Universal and Sheared Plates, 1.60c. to 1.85c.

**Rods.**—There is a scarcity in Rods for prompt shipment, and prices are very firm. We quote Bessemer Rods at \$36 to \$36.50, Pittsburgh, and Open Hearth Rods are held at about \$37.

**Muck Bar.**—Demand for Muck Bar is much better than for some time and the tone of the market is firm. Leading domestic makers are holding at \$35, Pittsburgh, while Eastern Muck Bar is being quoted at \$34, Pittsburgh. We note a sale of 1000 tons of Eastern Bar at this price.

**Spelter.**—The market on Spelter is firm and we quote best grades of Western Spelter at 5.05c. to 5.10c., Pittsburgh. We note that some sellers are asking higher prices.

**Steel Rails.**—The market is quiet. There was a rumor current recently that the price on Steel Rails was to be advanced to \$30, but this has been officially denied. We quote at \$28, at mill, for Standard Sections.

**Iron and Steel Bars.**—A good deal of tonnage is being placed in both Iron and Steel Bars and the market is very strong. Several leading makers of Iron Bars now quote at 1.85c., Pittsburgh, for carloads and larger lots. In Steel Bars a good deal of tonnage is being placed, the larger consumers now figuring on their requirements, being satisfied that there will be no reduction made in prices. We quote Iron Bars at 1.80c. to 1.85c. in carloads and 1.85c. to 1.90c. in small lots, half extras, as per National card. We quote Steel Bars at 1.60c., at mill. All specifications for less than 2000 lbs. of a size subject to the following differential extras: Quantities less than 2000 lbs., but not less than 1000 lbs., 0.10c. per lb. extra. Quantities less than 1000 lbs., 0.30c. per lb. extra, the total weight of a size to determine the extra regardless of length.

**Merchant Pipe.**—Demand for Pipe is exceedingly heavy, and the market is firmer than for a long time. The outside mills have booked a very large tonnage, and are holding recently established prices very firmly. Large contracts for Gas and Oil lines placed will give the mills steady employment for the heavier sizes of Pipe for the balance of the year. Pittsburgh basing discounts to consumers in carload lots, and which are now being rigidly held, are as follows:

	Merchant Pipe				Full weight			
	Pipe, Steel or Iron.		Wrought Iron.		Pipe, Steel or Iron.		Wrought Iron.	
	Bk.	Galv.	Bk.	Galv.	Bk.	Galv.	Bk.	Galv.
1/8, 1/4 and 3/8.....	68	58	65	55	67	57	64	54
1/2.....	70	60	67	57	69	59	66	56
3/4 to 6.....	75	65	72	62	74	64	71	61
7 to 12.....	73	63	70	60	72	62	69	59

**Iron and Steel Skelp.**—The Skelp market is more active than for a long time, and recently heavy contracts for Iron Skelp have been placed, which will largely take the output of the mills up to July or longer. Prices are higher, and we now quote Grooved Iron and Steel Skelp at 2c. and Sheared at 2.10c., Pittsburgh, or 2 per cent. off for cash in 30 days.

**Connellsville Coke.**—A large number of new Coke ovens are being built in the Connellsville region, among these being the following: Oliver & Snyder Steel Company, 800 ovens; Wheeling Steel & Iron Company, 400 ovens; Brier Hill Iron & Coal Company, 200 ovens; W. P. Murray, 200 ovens; Central Connellsville Coal & Coke Company, 150 ovens, and Orient Coal & Coke Company, 400 ovens. The Hecla Coke Company have just completed 100 ovens in the Connellsville region, and 50 have been fired. Shipments of Coke continue very unsatisfactory, and no permanent relief is in sight. Output of Coke in the Upper and Lower Connellsville regions last week was 289,725 tons. Furnace Coke for prompt shipment brings \$5, and 72-hour Foundry \$6.50 to \$7 a ton at oven.

**Scrap.**—The principal demand at present is for heavy melting stock, which is somewhat scarce and readily brings \$20.50 to \$21 in gross tons. No. 1 Cast Scrap is \$20.50 to \$21, net tons; No. 1 Wrought Scrap, \$21 to \$21.50, net tons; Old Car Wheels, \$24.50 to \$25, gross tons; Cast Iron Borings, \$11.50 to \$11.75, gross tons.

Ambrose Beard, division superintendent of the American Sheet Steel Company, Canal Dover, Ohio, has resigned, to take effect April 1. It is understood that this and other resignations that were published last week are part of a plan for securing economy in operation. Mr. Beard has been engaged in the sheet steel and tin plate business about 30 years, having commenced work at a very early age. He will probably engage in some other line of business in the near future.

## Birmingham.

BIRMINGHAM, ALA., March 2, 1903.

Assuming that the volume of inquiry indicates to a great degree the interest felt in the market, then the feeling is improving, for it had materially increased the past week and at the close there was every indication of its continuance. The column of prices was assaulted all along the line and in a few cases some slight impressions were made and there was a little wavering which was only temporary. The line was promptly restored and an almost solid front again presented to resist any material break in values. The amount let go at concessions was very limited in volume and hardly worth recording. And there was in every case a satisfactory reason for the act.

The weather has been against maximum production the past week, the excessive rains drowning out several mines and greatly hampering the mining of Ore. This mishap made the assembling of material an uncertain and undependable factor. The inconvenience greatly embarrassed furnace operations, which diminished output will show. Some large interests were active in inquiries, but they did not take hold and load up. They seemed to be feeling for weak spots, and failing to find them, postponed action. Concluded transactions were mainly with medium and small buyers, who took what they wanted at current values. One can only report transactions as very moderate in volume. The quotations here given are based on actual transactions, with the caution added that the sales made were in only medium and small lots and for spot and nearby delivery.

No. 2 Foundry sold at \$19.25, at \$19, at \$18.75 and \$18.50, depending on conditions in which delivery was an influential factor. Some No. 1 Foundry sold at \$20 and some No. 1 Soft sold at \$19.50, and another lot at \$20 and one at \$19.75. There was a sale of one mixed lot, delivery until June, on the basis of \$18.50 for No. 2 Foundry. No trades were reported in No. 3 Foundry. It is around \$18 in value. There were sales of Silver Gray at \$21 and at \$22 in small lots. It is hard to say what is the market for Gray Forge. It is in but small supply and those able to furnish a respectable quantity are very few. Those few are firm at \$17.50. A small quantity might be picked up under favorable circumstances at \$17, and it is rumored that near to \$16 at least one lot could be had. But there are parties right here who would jump at the chance to take in this lot if they could only locate it. But it is in hiding and nothing less than a search warrant can bring it out. No. 4 Foundry sold at \$17 in one case and also had that price refused in another case. There were some sales for the last half of the year on the basis of \$18.25 for No. 2 Foundry, but they were few in number and restricted in volume. The quotations here given plainly show the irregularity in prices that prevails. As heretofore reported to you, each interest makes its price regardless of that asked by its neighbor and don't worry a bit over missing a sale.

Complaints about cars have not yet ceased, but they are not so serious as they were. Those favorably situated are comfortable in this respect, while there are unfortunates who are yet bemoaning their condition regarding cars. In several instances mines have had to shut down again because of inability to obtain cars. We will have these intermittent spells of unsatisfied wants until we are well advanced into spring.

## The New York Machinery Market.

NEW YORK, March 4, 1903.

Hopes entertained in the machinery trade early last month that February would eclipse its predecessor from a standpoint of new business, were realized handsomely. Short as the month was in the number of business days, the aggregate of orders was better than that of January and considerably in excess of February of last year. Better still, however, it brought forth a large amount of inquiry, and showed an increased disposition among projectors of new work to "do it now." Buyers are now showing less hesitancy than they have displayed for some time back. Extensions to plants and new enterprises, which have been held in abeyance for months, were given new impetus during the last few weeks, and are now rapidly approaching the closing point as to purchases.

Doubtless the greatest problem with which the engineering fraternity are struggling at present is that of transportation in and about New York City. A good deal has already been printed about the great undertakings of the Pennsylvania and New York Central railroads. Some time ago a good deal was said about the enormous plans of the New York Rapid Transit subway and the monster power stations planned and in course of construction in New York City. At present, however, conditions point to a total inadequacy of these projects to cope with the transportation problem. It is acknowledged that even when the great underground system now under construction is completed there will be room for a duplication of it, and that there will still be room for further extension of the work. During the last month Chief Engineer Parsons of the Rapid Transit Commission

has been busy in propounding plans for the extension of the subway system. That something must be done and will be decided upon shortly is beyond doubt. The Metropolitan Street Railway Company have announced that they will convert all existing horse lines into electric routes at once. As this company have been leased by the Interurban Company, who will equip and operate the subway, it is believed in the trade that any extension to power stations on this account will be made to the subway station rather than to the Metropolitan power house. Purchases have been concluded for almost all of the equipment of the subway station, which is to take care of the system now under construction. It is predicted that specifications for the necessary equipment for the extensions will be out before the present station is in operation.

As we have previously noted considerable progress was made last month on the Pennsylvania and New York Central plans. The destruction of the Long Island City Station of the Long Island Railroad by fire, it is thought, will cause a hastening of plans for the Long Island terminal of the Pennsylvania Tunnel. At this terminal, it will be recalled, a large power station is planned. The functions of this station are to include the electrical operation of several of the Long Island lines now operated by steam. This work, it is figured, will proceed immediately, independent and in advance of the progress made on the more westerly sections of the work.

The tremendous amount of mechanical equipment which must be purchased in meeting of transportation demands in New York City will go a long way in continuing the present activity in the machinery trade. The work is so great that it must necessarily cover a long period, thus extending the duration of the prospects due to this source.

The Westinghouse Electric & Mfg. Company have commenced purchasing their equipment for their new plant extensions. As we have previously stated, the company intend expending something like \$1,000,000 in improving their works. The orders which they placed last week, we understand, cover a portion of the heavy tools required and amounted to about \$50,000. There is a belief in machine tool circles to the effect that the purchases of the balance of this equipment will be divided into several comparatively small sections instead of lumping them into one long list. The new works are to be practically a duplication of the present plant. Consequently the company know pretty well what machines they will require, and may take the matter up with the various builders of such tools as are desired direct instead of throwing the job open to the entire trade.

One of the largest orders for shop equipment placed in many months has just been awarded to Manning, Maxwell & Moore by Milliken Bros. of 11 Broadway. A blanket contract was awarded for all of the machine tools and cranes required in the equipment of the new Milliken plant on Staten Island. This contract, we are officially advised, amounted to about \$250,000. The new plant is to be devoted to the production of structural shapes for buildings and bridge work. It is expected to be completed on August 15. It will have a capacity of 30,000 tons annually. The Brooklyn plant of Milliken Bros. will be continued, and its production added to that of the new plant will give the firm a total production of 70,000 tons a year. It is intended to ultimately extend the new plant to a production of from 80,000 to 100,000 tons, and then abandon the Brooklyn works. It will therefore be noted that considerable more money will be expended in the future on the new Staten Island plant. The cranes purchased are to be electrically operated, and will be furnished by the Shaw Electric Crane Company.

Some months ago we referred to the organization of the Whitney Car Wheel Company of Philadelphia. We have it on good authority that this concern will now erect large shops at Camden, N. J., and will soon be in the market for a rather extensive machinery equipment. The company will locate their plant between Eleventh and Twelfth streets, Cheltenham avenue and the Pennsylvania Railroad on a tract 400 x 450 feet. Plans have already been drawn and bids for the buildings were received by the architects, Milligan & Webber, of Philadelphia, last Monday. The buildings to be erected will cost over \$100,000, and will all be of brick, with the most modern equipment. The work of construction is to be begun as soon as possible. The buildings and their dimensions are to be as follows: Wheel foundry, 40 feet high and measuring 98 x 176 feet; engine and boiler house, 56 x 56 feet, with a steel stack 125 feet high; machine and pattern shop, 50 x 85 feet; chemical laboratory, 40 x 40 feet, and a one-story office, 20 x 53 feet.

The Alberger Condenser Company, 95 Liberty street, New York, have acquired control of the Newburgh Ice Machine & Engine Company, Newburgh, N. Y. The latter company have been long and favorably known as builders of Corliss engines, ice machines and similar high class machinery. It is understood to be the intention of the Alberger Condenser Company to devote these works principally to the manufacture of improved condensers, vacuum pumps and Corliss pumping machinery, which they are using extensively in connection with high vacuum condenser installations. The recent developments in this class of work all tend toward the improvement of the parts that make up the

condensing equipment. This has been largely brought about by the demand for an extremely high vacuum in connection with steam turbines and the inability of the old types of apparatus to accomplish the results required in an efficient manner. The Alberger Condenser Company still retains close connection with the Quintard Iron Works of New York City, but rapidly increasing business has made it necessary to obtain additional facilities for the manufacture of special lines of work.

Information has just leaked out in the trade of the fact that the municipality of Allentown, Pa., are quietly buying large water works equipment. Bids were opened last night for 5 miles of 30-inch pipe, and on Friday, March 6, bids will be opened for an 80,000,000 gallon pumping engine.

The Lawrenceville Mfg. Company of Lawrenceville, Va., are erecting a new plant and have an inquiry out for the following equipment: One 125 horse-power engine, plain slide valve; two 75 horse-power boilers, one 20 horse-power boiler, vertical or portable; one 125 horse-power heater, one 150 horse-power duplex pump, one belt elevator to carry 2000 pounds, one 10,000 feet saw mill, belt feed; one 2-saw edger, a quantity of belt shafting, &c.; one clutch coupling, 2 15-16; 15,000 feet of 1-inch pipe for dry kiln, 40 wood split pulleys, four 18-inch headers for 7000 feet pipe for each kiln; dry kiln cars of iron and irons for wood frames; 600 feet 12-pound dry kiln track and a blower system for the sawdust and shavings. The officers of the company are R. Turnbull, president; P. J. Bostwick, treasurer; H. C. Risdon, secretary; Chas. Hooper, manager.

The Alberger Company, 695 Ellicott square, Buffalo, builders of the Buffalo tandem gas engine, have been awarded a contract by the Atlantic Refining Company of Philadelphia for two 600 horse-power double tandem gas engines, to be direct connected to General Electric alternators, and two 50 horse-power tandem engines to be direct connected to General Electric direct current exciters.

The Winchester Repeating Arms Company have recently increased the capacity of their gas power plant at New Haven by the purchase of two 165 horse-power Westinghouse three-cylinder producer gas engines. This company purchased the first American installation of gas power apparatus for industrial work. The present equipment comprises about 500 horse-power in Westinghouse gas engine-generator units and Loomis-Pettibone producers. The plant supplies electric power and light for operating the entire manufacturing establishment. The orders were secured by Westinghouse, Church, Kerr & Co.

Milliken Brothers of 11 Broadway, New York, whose works are located in South Brooklyn, have secured a contract from the Dunderland Iron Company of London, England, for the structural material for 12 buildings to be erected on the Norwegian ore properties, where the Dunderland Company will erect a plant for treating ore by the Edison concentrating process. The buildings will be used for crushing the ore, grinding, briquetting and conveyor frames, &c., and will be constructed of steel and sheet iron work, about 4000 tons of which will be required. In awarding the contract the matter of quick delivery was an important factor. Last December Milliken Brothers received a contract from the same company for bridges, shipment of which they agreed to make within ten weeks of receipt of order. The actual shipment was made in five weeks, which very much pleased the owners, and chagrined the English manufacturers, none of whom could deliver the work inside of four or five months.

The new plant of the McKeesport Tin Plate Company, at Port Vue, near McKeesport, Pa., is about finished, and the company expect to start the mill March 10. The plant contains 10 stands of tin mills, 10 sets of cold rolls and 19 finning stacks. The output will be about 40,000 boxes of tin andterne plate per month.

The new skelp mills of the United States Steel Corporation, at Sharon, Pa., were started up on Monday, March 2. The output will be about 400 tons of skelp per day, all of which will be used in the mills of the National Tube Company at McKeesport and Pittsburgh.

"Lacing a Belt" is the title of a neat little pamphlet issued by I. B. Williams & Son, manufacturers of belts and lacing, with factory at Dover, N. H., and selling offices at Chicago, Boston and New York. The manual makes clear and simple the practical method of lacing a belt, and also gives a few hints and handy rules for determining the size and increasing the life of leather belts. Some valuable information in regard to lace leather and belting is supplemented, the pamphlet being completed by a price-list.



## New York.

NEW YORK, March 4, 1903.

**Pig Iron.**—A much better demand is reported, especially for shipment up to June. Buyers in this locality are not yet disposed to do much for the last half of the year, although deliveries on some sales recently made extend into the fall months. We quote for prompt to early delivery: No. 1 X Foundry, \$23.50 to \$24.50; No. 2 X Foundry, \$22.25 to \$22.60; No. 2 Plain, \$21.50 to \$22. Tennessee and Alabama brands, in New York and vicinity, No. 1 Foundry, \$23.50 to \$24.50; No. 2 Foundry, \$22.75 to \$23.25; No. 3 Foundry, \$21.75 to \$22.25.

**Steel Rails.**—The most important contract coming to light during the week was negotiated by an Eastern railroad company and called for 30,000 tons. It is understood to have been placed with the United States Steel Corporation. It is possible that some shifting of contracts may be necessary owing to the strong probability that one of the Steel Rail companies having a considerable tonnage booked may not be able to begin to turn out rails at the time anticipated. Foreign manufacturers are not now quoting low prices, the German mills particularly being well supplied with work. It is not likely that rails could be secured from abroad at less than \$34, duty paid. We continue to quote \$28, at mill, for Standard Sections.

**Cast Iron Pipe.**—Quite a number of important orders are to be placed this week. Among them are 3700 tons at Allentown, Pa., 2600 tons at Boston, 1500 tons at Norwalk, Conn., and 700 tons at Yonkers, N. Y. A very large number of small orders have been booked, and inquiries received indicate a continuance of this class of business. The Pipe foundries say they never had a larger rush of orders. The small orders are springing up not only all over the East, but at many points in the West and through the South. Every indication is shown of this year being one of the largest ever known in the Pipe trade. Prices are stiffening, but we continue quotations at about \$34.50, gross ton, for 6 to 12 inch at tidewater.

**Finished Iron and Steel.**—Inquiries for bridge work and also for building construction are increasing. These inquiries include a great deal of very desirable work. It is therefore expected that a heavy tonnage will be entered very shortly. Capitalists appear to be making up their minds to go ahead with improvements which had long been planned. The labor troubles which are now annoying the structural trade are not expected to be either serious or protracted. The loss by fire of the Schultz works of the American Bridge Company at Pittsburgh will not seriously interfere with the business of the company, as the shop was not a large one, although it ranked among the very efficient plants of the company. The demand for Plates in this vicinity has been confined to small lots. Prices are maintained by the Eastern mills. The fuel supply now seems to be approaching its normal conditions and the mills are making a good output, but the railroads are still making poor deliveries. We quote at tidewater as follows: Beams, Channels and Zees, 1.75c. to 2c.; Angles, 1.75c. to 2c.; Tees, 1.80c. to 2c.; Bulb Angles and Deck Beams, 1.90c. to 2.25c. Sheared Steel Plates are 2.10c. for Tank, 2.20c. for Flange, 2.35c. to 2.40c. for Fire Box. Refined Bars are 1.95c. to 2c.; Soft Steel Bars, 1.75c. to 1.90c.; Foreign Beams, 1.72½c. in large lots.

**Old Material.**—The inquiry is considerably better from rolling mills, Steel works and foundries. A good volume of business has been transacted during the week, and some large deals are pending. It is getting to be realized that the railroad Scrap of the country is falling more and more into certain channels for disposition on account of the large amalgamation of the interests using such Scrap. Buyers are becoming convinced that by reason of the comparatively limited quantity of such material now coming on the market it is wise to look ahead. Both consumers and dealers are consequently showing a greater disposition to contract for their future requirements. It is asserted that contracts could now be made without much difficulty for even a year's delivery. We quote, f.o.b. cars, vicinity of New York, per gross tons:

Old Iron Rails.....	\$24.00 to \$24.50
Old Steel Rails, long lengths.....	21.00 to 21.50
Old Steel Rails, short pieces.....	18.75 to 19.25
Relaying Rails, heavy sections.....	29.00 to 30.00
Relaying Rails, lighter sections.....	31.50 to 32.00
Old Car Wheels.....	23.50 to 24.00
Old Iron Axles.....	30.00 to 31.00
Old Steel Car Axles.....	25.50 to 26.50
Heavy Melting Steel Scrap.....	18.75 to 19.25
No. 1 Railroad Wrought Scrap Iron.....	22.50 to 23.00
Iron Track Scrap.....	19.50 to 20.00
Wrought Pipe.....	15.50 to 16.00
Ordinary Light Iron.....	11.50 to 12.00
No. 1 Machinery Cast Scrap.....	19.00 to 20.00
Stove Plate.....	14.50 to 15.50
Wrought Turnings, delivered at mill.....	17.00 to 17.50
Cast Borings, delivered at mill.....	11.00 to 11.50

Davis Brothers, manufacturers of Spikes, of Philadelphia, have discontinued their agency in New York.

## Metal Market.

NEW YORK, March 4, 1903.

**Pig Tin.**—To the operators who have been manipulating the spectacular upward movement, the last three days have been the happiest of a rather unusually protracted period of happy days. They succeeded in "booming" the market to the tune of more than £4 in London and 1.12½c. here. These are great days for the "boomers." They are "playing both ends against the middle." On Monday the American Tin Plate Company announced an advance of 20c. per box on account of the increased price of Pig Tin. The Pig Tin operators immediately packed the price of Tin up several points on account of the increase in Tin Plates. In the meantime consumers are keeping as far away from the market as their present supplies and immediate requirements will allow them. When the monthly statistics were made known last Monday there was a lively hum among the coterie of manipulators at the Metal Exchange. It was occasioned by the fact that the visible supply had decreased 749 tons, as compared with February of last year. Judging from the quantities that are coming in and the small demand of consumers, however, this small falling off will cause no alarm to consumers. At the close of the market to-day spot was quoted 30.62½c. to 31c., and March and June was quoted 30.50c. to 31c. London closed £138 7s. 6d. for spot, and £139 5s. for futures. The statistics for Europe and the United States, as compiled by C. Mayer, secretary, show:

	Tons.
Total visible supply February 28, 1903.....	16,294
Against visible supply January 31, 1903.....	17,679
Against visible supply February 28, 1902.....	17,043
Arrivals at the Atlantic ports amounted to.....	3,275
Total arrivals since January 1, 1903.....	5,820
Of which from Straits by direct steamers.....	1,705
Of which from United Kingdom.....	3,870
Of which from Holland.....	85
Of which from European Continent.....	160
The deliveries for February we figure as.....	2,800
Total deliveries since January, 1903.....	6,100
Deliveries same period in 1902.....	5,000
The shipments from Straits amounted to.....	3,450
Against previous month.....	4,615
Against February, 1902.....	4,337
Australia shipped.....	250
Against previous month.....	400
Against February, 1902.....	138

Statistics for the United States—Pacific Ports excluded—February 28, show as follows:

	Tons.
Stocks February 26, including on dock and vessels.....	3,842
Adopt.....	4,485
Total.....	8,327

**Copper.**—Further advances in price have been accomplished by the powers in charge of events. As they have done throughout the entire movement, consumers have stood aside without buying. Some few were forced to buy, but it can safely be stated that they did not engage for one ounce more than their requirements compelled them to. Even some of the brokers who have fallen into the prevailing spirit of "booming things" are a little surprised at the duration of the present boom. Lake and Electrolytic are now nominally 13½c. to 13¾c. Casting is quoted 13.30c. to 13.60c., and Standard is chalked up on 'change as 13c. London scored further advances also, being quoted to-day: Spot, £59 15s. 6d.; futures, £60, and Best Selected, £65 5s. Exports during February were very small; during the first two months of this year the decrease in the exports amounts to 10,312 tons, as compared with the corresponding period of last year. The exports of domestic Copper from Atlantic ports for the month of February, as per official returns, and compiled by C. Mayer, secretary, were as follows:

	Tons.
From New York.....	5,730
From Baltimore.....	2,955
Total.....	8,685

During the same month the following arrived at New York, Baltimore and Philadelphia by steamers only:

	Tons.
From Europe, Copper.....	852
From Mexico, Copper.....	1,241
From Japan, Copper.....	35
From Spain, Ores.....	3,800
Total exports since January 1, 1903, exclusive of Southern ports for February.....	19,163
Against same period in 1902.....	29,475

**Pig Lead.**—Aside from further advances in London the market is absolutely without change. The Smelting & Refining Company are still quoting on a basis of 4.12½c. for spot Desilverized and 4.10c. for futures. St. Louis is also unchanged. London quotes £12 12s. 6d.

**Spelter.**—The market is steady, with prices a little higher and in St. Louis business is good, but not particularly active. Quotations here range from 5.10c. to 5.15c., while St. Louis has advanced to 4.90c. London has advanced slightly to £21 15s.

**Antimony.**—Is lower both in this market and London. Hallett's is now quoted 6¾c. to 6½c. Cookson's has declined to 8¼c. to 8¼c., and other brands are quoted 6¾c. to 6½c.



**Nickel.**—No change is noted. Large quantities down to ton lots are now quoted at 40c. to 47c. per lb., according to size and terms of order. Smaller lots are quoted as high as 60c., according to quantity.

**Quicksilver.**—Is unchanged at \$47 per flask of 76½ lbs. each in lots of 50 flasks or more. London cables £8 12s. 6d.

**Tin Plate.**—On Monday, March 2, the American Tin Plate Company announced an advance of 20c. per box on Bright Plates. No change was made, however, on Black Plates. Orders will be taken, we are informed, at the new prices for three months' delivery. The cause stated for the advance was the increased price of Pig Tin and Coal. The company announce that they are so busy that prompt shipments cannot be booked. The present price is based on \$3.80 per box of 14 x 20 100-lb. Cokes, f.o.b. mill, and \$3.99 New York delivery.

### The Brown-Corliss Engine Company.

At a special meeting of the stockholders of the Brown-Corliss Engine Company, held at Corliss, Wis., February 26, it was decided to increase the capital stock of the company from \$1,000,000 to \$1,200,000. The payments for the new stock will be called in three monthly payments in March, April and May. The company expect to run both a night and day shift as soon as castings can be obtained fast enough to permit. The operating expenses will thereby be considerably reduced. In a recent circular addressed to the stockholders the management state that the work they are being offered runs into the largest type of engines, which require from three to eight months to build, and that the additional capital is necessary to complete the contracts economically. The company have expended \$45,000 in providing homes for their employees, with a satisfactory interest accruing from the money invested. As indicating the amount of business in sight, the management note that between December 2 and February 16 they bid on contracts aggregating \$1,295,464, a portion of which they secured. The company have recently begun the manufacture of rolling mill and blowing engines.

### PERSONAL.

C. C. Murray will be connected with the Railway Appliances Company, with headquarters at Pittsburgh, giving his time more particularly to the sale of the Q & C pneumatic tools.

George T. Oliver of Pittsburgh, accompanied by his two daughters, has gone to Europe for a two months' visit.

Frank B. Smith, general manager of the Crucible Steel Company of America, at Pittsburgh, has gone to the Bermudas for an extended visit.

Wm. Brown, superintendent of the steel plant of the Lukens Iron & Steel Company, Coatesville, Pa., has resigned his position to accept that of general superintendent of the Passaic Steel Company, Paterson, N. J. Mr. Brown will assume his new duties about the middle of March.

### Trade Publications.

**Steel Castings.**—The Philadelphia Steel & Iron Company of Frankford, Pa., have issued a catalogue dealing with their castings made of Atlas steel. This steel has a tensile strength of over 60,000 pounds per square inch. It is particularly well adapted for gear wheels, and blank gears are easily machined.

**"Fire Proof Elevators for the Storage of Grain"** is the title of a catalogue by the Steel Storage & Elevator Construction Company of Buffalo, N. Y. A 1,500,000-bushel elevator built by this company at Fort William, Ont., carries no insurance and the saving in this item alone will pay the entire first cost of the elevator in seven years.

**Water Softening and Purifying Apparatus** is described in a catalogue by the Industrial Water Company of 126 Liberty street, New York. In this apparatus the inflowing stream of raw water is made to operate a wheel which furnishes the power for the stirring device. The water, after the chemicals have been added to it, is so thoroughly agitated, that as good results are accomplished in the daily operation of these machines as by a chemist in a laboratory. The process removes all oil, scale producing ingredients, mud and acid. The chemicals used are quick lime and soda ash.

### OBITUARY.

**MAURICE EDWARD VIELE**, a prominent retired Hardwareman of Albany, N. Y., died there February 20. He was the son of John L. Viele, and was born in Waterford, N. Y., May 17, 1823. In 1845, in partnership with Alexander Davidson, he established an iron and hardware house now known as the Albany Hardware & Iron Company. He had served as a trustee of Rutgers College since 1853, as a trustee of the Albany Orphan Asylum since 1850 and as a trustee of the Albany Academy since 1872.

**JOSEPH C. JONES**, proprietor of the Emporia Foundry & Machine Works, died recently at his home in Emporia, Kan., aged 52 years. He was born in England, and moved in 1872 to Emporia, where he amassed a fortune in the foundry business.

**CHARLES M. DAY**, formerly superintendent of the Draper Company, Hopedale, Mass., and a director of the Portland Iron & Steel Company, Portland, Maine, died on Saturday, February 21, after an illness of two days. The deceased was 43 years old, and had been connected with the Draper Company for many years.

**DAVID C. FOSTER**, formerly in the iron manufacturing business, died in Poughkeepsie, N. Y., on February 28, in the ninety-fourth year of his age. He was born in Connecticut, and removed to Poughkeepsie in 1827. He first engaged in the coal and lumber business, and later with George and William Sterling entered into the manufacture of iron, operating furnaces at Beekman, N. Y. He was the oldest bank president in the United States when he retired on January 1 from the presidency of the Poughkeepsie Savings Bank.

**A. L. MURPHY**, general manager of the Longmead Iron & Tube Works, Conshohocken, Pa., died suddenly from apoplexy on February 27. He was president of the National Tube Work Makers' Association, and had patented a tube welding machine.

**JOHN M. STETSON**, superintendent of the Bridgewater Iron Works, died in Bridgewater, Mass., February 25. He was born in Bridgewater in 1853, and had always lived there.

**JAMES A. KENNEDY**, for several years general superintendent of Mattie Furnace of the Girard Iron Company, at Girard, Ohio, died in Youngstown, Ohio, last week. Mr. Kennedy was 42 years old, and is survived by his widow.

**JOHN W. MAST** died at his home in Little Rock, Ark., early in February, after a short illness. He was senior member of the firm of John W. Mast & Co., and was born in Wurtemberg, Germany, in October, 1830. The business will be continued by his son, John W. Mast, Jr.

**EDWARD HANLON** of Hanlon Bros., Medina, N. Y., died early in February at his home in that city after a long illness. Mr. Hanlon was born in Lockport, N. Y., in 1847, and at an early age entered the hardware store of Oscar Whedon, where he worked until 1876, when he formed a partnership with his brother, J. A. Hanlon.

Owing to a strike at the Alliance Works of the American Steel Casting Company, at Alliance, Ohio, the company have threatened to remove this plant to some other point, unless the men return to work at once on the company's terms.

The Westinghouse Apprentices' Association held a banquet in the Monongahela House, Pittsburgh, on Saturday evening, February 28, which was attended by a number of leading officials of the Westinghouse Electric & Mfg. Company. The association was organized about a year ago and has for its members students from all the nations of the world, who are now engaged in practical study of electricity in the works of the Westinghouse Electric & Mfg. Company, at East Pittsburgh.

## Philadelphia Machinery Market.

PHILADELPHIA, February 28, 1903.

Activity continues in nearly all branches of the Philadelphia machinery market, and the volume of business compares favorably with that of January, but there have been no record breaking transactions during the past month. Business during February was of a more uniform day to day character, and while the aggregate has been satisfactory the absence of large specifications has been generally noted. Some of the large requirements, however, have only been partially closed, and good business is still looked for from those sources. Inquiries have been fairly good, and in some instances have been equal to and even exceeded the number for January, but there were a number of lines in which a slackening has been noticeable. This, however, has had no marked influence, as nearly all manufacturers have a large number of orders on their books, with sufficient work to keep their plants running steadily for some time, although there are some shops that could handle more business quite comfortably.

Inquiries have not developed into orders quite as rapidly as some have hoped for, and in some cases purchasers are evidently feeling their way. It is the general opinion that, were it not for the uncertainty of the labor question, business would be transacted much more freely. Many are anxiously awaiting the announcement of the findings of the Anthracite Strike Commission, and believe that future developments will hinge largely on the decision reached by them.

Manufacturers of heavy tools, special machinery, cranes and heavy engines continue extremely busy, and all have sufficient work on hand to keep their plants running at full capacity for a long time. Orders are being booked by some for 1904 delivery, while it is almost impossible to get anything inside of three or four months. The same difficulties continue to affect many manufacturers as have been the case during the past few months. Pig iron, while more plentiful, is still more or less uncertain, particularly in the standard brands. Coal and coke are still most important items of raw material, as prices are high, and it is almost as hard to get good supplies as it was a month ago. Foreign coal has been used to some extent, and is reported by some manufacturers to have given good results. Deliveries on the foregoing class of machinery are for the various reasons mentioned still more or less uncertain.

Foreign demand continues dull. There is no immediate prospect of any important developments in that trade under existing conditions, both at home and abroad. In some particular branches, such as pneumatic machinery, business still continues active; but in general machinery lines no improvement is noticeable.

A fair inquiry continues for the medium size and standard machine tools, but business is not as active as it might be. Machinery dealers' floors are well filled on these lines and generally quite prompt deliveries can be made.

The various steel and iron foundries continue extremely busy and no particular improvement, except in the case of some gray iron foundries, has been noticeable in deliveries. The uncertainty of obtaining raw materials affects many foundries to a great extent. The scarcity of pig iron and fuel, which in some instances is not up to the standard of quality, has greatly hindered a number of foundries, and while such conditions exist, more or less delay in obtaining castings must be expected.

A good demand for the lighter machine tools, engines, boilers, &c., continues, and some good business has been done during the past month. Deliveries on some of these lines have become a shade easier. No change is to be noted in the demand for machine shop supplies. Nearly all manufacturers continue quite busy, and on nearly all lines deliveries continue slow.

Prices generally are unchanged, quotations being fairly well maintained, with little tendency toward manipulation. In some few lines, where the cost of manufacture has advanced and on which there is not much competition, prices have materially hardened.

Plans are again posted for the erection of a \$100,000 plant for the Whitney Car Wheel Works, at Camden, N. J. Machin & Brown are the contractors.

The J. R. Van Dyck Company, who have recently opened quarters in the Bourse, report a satisfactory condition of trade. A large amount of machinery has been placed on their floors, and some very good sales have been made, among which may be mentioned two 96-inch Western radial drills for shipment to Eastern Pennsylvania parties.

W. E. Shipley, representing the Lodge & Shipley Machine Tool Company, reports a good steady volume of business. Inquiries as well as orders are numerous, covering lathes, milling machinery, radial drills, &c. One notable shipment recently made was of 20 variable speed countershafts for use in connection with milling machines, while deliveries on the general line of tools have also been made to various local and nearby parties.

The Philadelphia Rapid Transit Company are to build

a new repair shop and rail storage house at Schuylkill and Sutherland avenues. It will be a two-story brick structure, 148 x 185 feet. A local permit to begin operations has been taken.

The Espen-Lucas Machine Works, who recently purchased the designs, plans, &c., as well as many of the tools of the late Franklin Machine Works, and who are now manufacturing a number of the tools formerly made by the latter company, report a very satisfactory condition of business. A number of orders have been booked and the plant continues to be operated at its best capacity. Several orders have been taken for Franklin tools, and a number of their new cold saw cutting off machines have been shipped to various concerns.

Israel H. Johnson, Jr., & Co. report a steady demand for their lathes, and all departments of their works continue busy. Inquiries have been numerous and some good orders have been recently booked. Lathes of different sizes are regularly being delivered to local and out of town parties.

The Falkenau-Sinclair Company report a very satisfactory month, inquiries having been plentiful, of which a good share materialized in orders. The demand for their standard metal working machinery has been particularly good. A large amount of work is in the course of erection, and recent deliveries include the first of five governors building for the Niagara Falls Power Company, to be used on their 5000 horse-power turbines. A number of large standard presses have also been shipped to local and New England parties. A Moore wire testing machine has been delivered to the American Steel & Wire Company, Worcester, Mass., and four special cutting off lathes are about ready for delivery to the Frankford Arsenal, United States Government.

Thos. H. Dallett & Co. report a good trade in their various lines, the demand for pneumatic tools being particularly large. Inquiries generally have been satisfactory, and all departments of their plant continue busy. A number of pneumatic tools have recently been shipped to various shipyards, locomotive works and structural iron shops, while deliveries of electric portable and rope driven drills, as well as special drills, have also been made to local and other parties.

The Philadelphia Pneumatic Tool Company continue busy in all departments. The demand for pneumatic tools is maintained, and a large number of orders have been taken. Considerable new automatic machinery has been installed by this company, and other changes made to increase the capacity of the plant. A large number of tools have been shipped during the past month, particularly rotary drills, of which over \$10,000 worth were shipped in two days. A number of tools for roughing sugar rolls were also shipped to the New Colonial Company, Usine Ste. Madeline, Trinidad, while various shipments have been made to the Cambria Steel Company, Johnstown, Pa.; Lackawanna Steel Company, Buffalo, N. Y., and the Baldwin Locomotive Works, Philadelphia.

The American Pulley Company note an increased demand for all steel pulleys from both foreign and domestic sources. All departments of their plant are kept continuously busy, and a number of good orders have lately been taken, one of which was for 1000 pulleys for export to London, England. Shipments of carload lots of pulleys have recently been made to Cleveland, Ohio; Chicago, Ill., and Seattle, Wash. Exportations to New Zealand, Australia, and other countries have also been made.

The Link-Belt Engineering Company are busy in all departments. Orders for a large amount of general work have been received, and the plant is being operated to its full capacity. Inquiries are numerous and the estimating department is very busy. Considerable business is in sight on coal storage plants, and some good trade is expected from that source in the near future. Some very good orders have also been taken for Renold silent chain drives, among which was the equipment of Triplex pumps for the Atlantic Refining Company of this city. This equipment will consist of 17 medium speed drives, each having a special compensating wheel to take up the different conditions of operation. Orders have also been received for drives for seven printing presses for the Department of Public Printing, United States Government, Washington, D. C.

The Tabor Mfg. Company have booked a large number of orders for their molding machine, and inquiries continue to be received, both from foreign and domestic sources, in good quantity. The various departments of their plant are being operated at full capacity, and the prospect for future business is considered very favorable. Among recent deliveries were one split pattern type, 16 x 26 inches, and one 8-inch power rammer for the Gould Mfg. Company, Seneca Falls, N. Y.; one 14 x 16 inch split pattern molding machine to H. K. Porter Company, Pittsburgh, Pa.; one 13 x 18 inch split pattern and one 7-inch power ramming machine to McRae & Roberts, Detroit, Mich.; a 13 x 20 inch split pattern machine to Wexford, Ireland, and a 7-inch power rammer and a 13 x 18 inch split pattern machine to the Standard Steel Works, Burnham, Pa. An additional 7-inch power ramming machine has also been shipped to the Neptune Meter Company, Brooklyn, N. Y., and delivery of an



18 x 26 inch split pattern molding machine will shortly be made to the American Locomotive Company, Richmond, Va.

The Eynon-Evans Mfg. Company will triple the capacity of their present power plant in the near future. A new direct connected engine and a new air compressor are to be installed, for both of which they are now in the market. They also expect to double the size of their office and will triple the size of their present drawing room. Additions will also be made to the machine shop. These improvements, together with others recently made, will greatly facilitate their work and largely increase the productive capacity of the plant. The demand for their various lines continues good, and shipments of blowers, condensers, general castings, &c., are being regularly made to local or out of town parties.

Dienelt & Eisenhardt report very satisfactory conditions. Inquiries are being well maintained and a good number of orders are being booked. A large special oil cloth printing machine was recently shipped for export and others are building for local parties. The demand for dead stroke hammers and hydraulic jacks is large and a number of each have been shipped to various concerns.

The Alfred Box Company have plans in course of preparation for the extension of their present plant. To obtain additional space purchase has recently been made of property on Front street adjoining their present girder shop; this lot of ground has 124 feet frontage on Front street and is 207 feet deep. Inquiries for electric traveling cranes and hoists continue good and some very satisfactory business has been booked, including among other orders a complete marine railway equipment for the Mutual Machine Company, Washington, N. C. Orders for 14 5 and 7 ton 3-motor electric traveling cranes for the Schenectady, N. Y., shops, and ten more of the same type for the Lynn, Mass., shops of the General Electric Company have been taken. All departments of the Box Company's plant are being operated to their best capacity, and numerous deliveries of cranes are being made, among which may be mentioned: One 15-ton three-motor traveling crane, for the new foundry of the Cresswell-Waters Company, Nicetown, Philadelphia; one 5-ton three-motor, for Wm. Wharton, Jr., & Co., Philadelphia; one 45-ton hand power, with side platform, for the Superior Portland Cement Company, Martin's Creek, Pa.; one 5-ton electric traveling crane, for Bridgman Bros. Company, Philadelphia, and one 10-ton three-motor, for Morse, Williams & Co., Philadelphia.

Activity continues unabated at the crane department of the Niles-Bement-Pond Company. Inquiries are reported satisfactory, and a large amount of business is being booked. The new additions to the plant are nearing completion, all the buildings now being under roof and almost ready for the installation of machinery. When these various extensions are completed this plant will have a productive capacity on standard cranes (up to 30 tons capacity) of one crane a day. All departments of the plant are being operated to their best capacity, and among recent shipments may be mentioned: One 10-ton electric traveling crane, 45-foot span, for the Llewellyn Iron Works, Los Angeles, Cal.; one 60-ton crane, with a 10-ton auxiliary hoist, to the Mexican Central Railroad for the Monterey, Mexico, shops; a 30-ton crane, 70-foot span, with a 5-ton auxiliary hoist, and a 75-ton crane, 70-foot span, with double trolleys, designed as a locomotive lift, to the New York Central Railroad for their Oak Grove, Pa., shops; a 10-ton, 60-foot span crane, with a 2-ton auxiliary hoist, to the Algoma Steel Company, Sault Ste. Marie, for use as an ingot crane; five 75-ton cranes, 60-foot span, with 25-ton auxiliary hoists, to the Homestead Works of the United States Steel Corporation.

The Baldwin Locomotive Works continue extremely busy in all departments. Inquiry for locomotives keeps up well, and orders for a number have recently been booked; among these were two engines for the Nevada, California & Oregon Railroad and two six-wheel switching and two consolidation locomotives for the South Buffalo Railway Company. Orders have also been booked for deliveries to some roads during 1904. Improvements to the Baldwin plant continue. The new machine shop at Sixteenth street and Pennsylvania avenue has been completed and is now occupied, while the new tank shop is now one-half under roof. Recent deliveries of standard types of locomotives have been made to the Boston & Maine, Western Maryland, Oregon Short Line, Chicago, Burlington & Quincy, St. Louis & San Francisco and the Union Pacific roads. Electric mine locomotives also continue to be shipped to various concerns, averaging about two per week. Three large electric locomotives, with alternating current motors, were recently shipped for towage service on the Erie Canal.

The Diamond Drill & Machine Company, Birdsboro, Pa., have about completed the foundry built to replace that destroyed by fire last June. This plant, we are told, is the most up to date foundry in this section, and it is expected that castings will be made during the present week. Some recent shipments by these parties include three armor plate test cutting machines to the Carnegie Steel Company and a carload of shears to the Colorado Fuel & Iron Company. A large amount of work is under way, including hydraulic ingot strippers, hydraulic car pushers, &c. This company

are installing a new power plant which will double the capacity of the present one. Plans are also in course of preparation for a large new pattern store house.

The Royersford Foundry & Machine Company, Royersford, Pa., advise us that a large number of inquiries are being received for the Royersford punch and shear, and orders are being constantly entered. The foundry has a good quantity of work ahead and all departments are being operated to their full capacity. Recent shipments include a No. 3 single end punch, to Liberman & Sanford, New York; a No. 2 single end punch, to the F. Shaw Company, Wilmington, Del.; a combined machine, to Spach Bros., Winston-Salem, N. C., and another, being the fourth of its kind, to the Anthracite Separator Company, Hazelton, Pa.

## Boston Machinery Market.

BOSTON, MASS., February 28, 1903.

This week there is not such a unanimity of opinion among the Boston dealers in machinery and machine tools. The machinery people report little change in business conditions. There are many inquiries from people who wish to place small orders, and the aggregate of these indicate good trade. As has been the rule for some time, these orders are not confined to special lines of machinery, but cover a large variety. In short, the conditions seem to be very satisfactory to dealers and a good year's business is anticipated.

The discordant note comes from some of the dealers in machine tools, who report a decided falling off in business since February 1. Other dealers say that there is no great change in conditions, and that business is as satisfactory as could be expected at this season. Altogether, it cannot be said that the end of the trade's prosperity is yet in sight.

The Boston Transit Commission has decided to build the East Boston Tunnel under the subway at Scollay Square, in this city, connecting the two with stairways. Probably the tunnel will be continued under Court street to Bowdoin square. The construction shield is being operated night and day under lower State street. About 400 feet of that section of the tunnel is still to be built.

The Old Colony Street Railway Company have purchased 80,000 feet of wharf property at Fall River, Mass., on which they propose to build a power house to supply power for all their lines between Quincy, Mass., and the Rhode Island State line.

The Bates Mfg. Company of Lewiston, Maine, have placed orders for machinery with the Kitson Machine Company, the Lowell Machine Shop and the T. C. Entwistle Company of Lowell, Mass., and the Woonsocket Machine & Press Company of Woonsocket, R. I.

The Road House Mfg. Company, to deal in automobile boilers, &c., have been incorporated under the laws of Maine, with a capital of \$500,000. John T. Etzel of Boston is president and treasurer, and the other incorporators are Elijah K. Brown of Boston and Charles L. Marston of Portland.

## Iron and Industrial Stocks.

The general stock market during the week has been depressed by the increasing stringency in money caused by the usual heavy spring requirements from the West and South. Rates on both call and time money have advanced. It had been hoped that Congress would pass the Aldrich bill, which would enable the banks to increase their note issues at just such periods as this, but unfortunately the bill has failed to pass and disappointment over this has still further depressed the market. Prices of stocks have all shown some decline as compared with the previous week. An important incident of the week was the decision of the directors of the United States Steel Corporation to proceed with the plan for the conversion of \$200,000,000 of preferred stock into 5 per cent. bonds. Advertisements to this effect appeared on Wednesday morning.

The Union Trust Company and the Mellon National Bank of Pittsburgh are sending out subscription blanks for \$5,000,000 of the 5 per cent. first mortgage bonds of the Union Steel Company. The bonds are guaranteed by the United States Steel Corporation, and the authorized issue is \$45,000,000. The bonds are offered at 101 and the accrued interest. Accompanying the subscription blanks is a letter from A. W. Mellon, formerly vice-president of the Union Steel Company, explaining the purposes of the issue and the security for the same. The letter, in part, is as follows: "An important feature provided in the mortgage is the unusually liberal sinking fund. Under its provisions there will be paid to the trustee during the present year, and each year thereafter, 2 per cent. upon the entire issue outstanding, which is to be used in the purchase of bonds of the present issue at price not exceeding 110 and interest, or, after 1907, in the redemption of bonds at 110 and interest; all bonds so purchased or redeemed for sinking fund to be stamped for that purpose and continue to bear interest for sinking fund purposes. Under these provisions the sinking fund, with its accumulations, will retire and extinguish the total bonded indebtedness in 27 years, being very little over half the term of the mortgage. The bonds are therefore



amply secured by the Union Steel Company property, and have, in addition, the absolute guarantee of the United States Steel Corporation, which is indorsed on each bond."

Fair sales have taken place on the curb during the past week of the new 5 per cent. bonds of the Lackawanna Steel Company at 98½ to 99, when issued.

**Empire Steel & Iron Company.**—At the annual meeting of the stockholders of the Empire Steel & Iron Company, held on the 25th inst., the directors reported net earnings from operations, investments, &c., less \$46,575.26 charged off for depreciation, as being \$203,087.37; and further stated that an additional sum spent for improvements, amounting to \$170,147.79, had also been charged to profit and loss. They dwelt at some length on the anthracite coal strike, which necessitated the stoppage of the larger portion of their furnaces during a period of unparalleled activity in the general iron market, thereby causing a loss in production of about 60,000 tons of pig iron, which otherwise would have added largely to the year's profits. Special reference was also made to the Oxford and Mount Hope ore mines in Warren and Morris Counties, N. J., where large modern power plants have been installed, which, together with the additional openings into the different veins of ore, will materially reduce the cost of mining and give the furnaces a large supply of cheap, high grade ore for many years to come. All of the furnaces (12 stacks) are now in full operation, and the combined daily output is close to 1000 tons of iron. The following is the condensed balance sheet at the close of business December 31, 1902:

Assets.	
Real estate, plants and machinery.....	\$2,842,900.00
Stocks and bonds.....	2,075,002.00
Cash in bank.....	105,221.05
Accounts receivable.....	139,884.50
Bills receivable.....	107,550.00
Inventories, pig iron, raw material, ore, &c.....	314,375.69
Advance royalty and payment on ore contracts....	35,934.08
Total .....	\$5,620,867.32
Liabilities.	
Capital stock, preferred.....	\$2,500,000.00
Capital stock, common.....	2,281,400.00
Bills payable.....	469,861.45
Accounts payable.....	173,277.67
Pay roll.....	14,882.25
Fund for depreciation and bad debts.....	15,356.48
Dividends payable January 1.....	37,500.00
Profit and loss.....	128,639.47
Total .....	\$5,620,867.32

The directors of the company are Archer Brown, Leonard Peckitt, C. H. Zehnder, Mark T. Cox, J. S. Morgan, P. Kleeburg, F. M. Jeffery, E. R. Chapman, and J. W. Fuller. The officers are president, Leonard Peckitt; vice-president, C. H. Zehnder; secretary, J. M. Fitzgerald, and treasurer, J. S. Stillman.

**Dividends.**—The Republic Iron & Steel Company have declared the regular quarterly dividend of 1½ per cent. on the preferred stock, payable April 1. Books close March 16; reopen April 1.

Cambria Iron Company have declared a dividend of \$1 per share.

## PERSONAL.

W. E. Corey, president of the Carnegie Steel Company, at Pittsburgh, announces that E. E. Slick has been appointed chief engineer of the New Castle district, covering steel works and furnaces of the National Steel Company, at New Castle; steel works and furnace of the National Steel Company, at Sharon, and the blast furnaces, open hearth department, blooming mill and plate mill of the Sharon Steel Company, at South Sharon.

George Needham of the firm of John Needham & Sons, iron merchants, of Manchester, England, is now in this country.

W. E. Brown, manager of the Universal Sanitary Ware Company's works at South New Castle, Pa., has been elected secretary of the New Castle Board of Trade.

A. G. Hathaway, who has been vice-president and manager of the Vulcanus Forging Company, Cleveland, Ohio, for several years, has resigned and opened offices in The Cuyahoga, Cleveland. He will carry a full line of railroad supplies and make a specialty of car forgings.

J. P. Morgan and W. E. Dodge have subscribed \$25,000 each, and Andrew Carnegie \$50,000, to a fund of \$500,000 in memory of Abram S. Hewitt. It is to be used to endow Cooper Union.

W. F. Donovan, president of the Eastern Steel Company of Philadelphia, took the initiative in a movement to establish an American Academy of Dramatic Art, \$250,000 having been subscribed toward a proposed fund of \$2,000,000.

John Stevenson, Jr., who recently resigned the position of vice-president of the Sharon Steel Company, at Sharon, Pa., was presented by the office force with a very handsome bronze statuette.

John F. Lent, formerly traffic manager of the Union Steel Company of Pittsburgh, but who resigned some time since, has been appointed to a similar position with the Standard Steel Car Company of Pittsburgh.

Reuben Miller, Sr., will resign his position of president of the Crucible Steel Company of America, of Pittsburgh, on May 1. Mr. Miller will spend the summer at his cottage in the Muskoka region of Canada. He will continue as a member of the Executive Committee. Frank B. Smith, now general manager, will succeed Mr. Miller as president.

James B. Oliver of Pittsburgh has gone on a trip to Mexico.

Charles S. Powell, who has been associated with the Westinghouse electric interests since 1893, and who for the past six years has been manager of the Cleveland office of the Westinghouse Electric & Mfg. Company, has been appointed assistant manager of the British Westinghouse Electric & Mfg. Company, Limited, London, W. C.

Walter Camp has been elected president of the New Haven Locomotive Company, New Haven, Conn., to succeed the late S. A. Galpin. George E. Stevens of New York succeeds Mr. Camp as vice-president, and Frank Stevens becomes secretary of the company, E. P. Root being elected a director in succession to Mr. Galpin.

Benjamin Talbot, the inventor of the continuous open hearth process bearing his name, sails for home on Saturday.

The vacancy created by resignation of Ambrose Beard, division superintendent American Sheet Steel Company, Canal Dover, Ohio, has been filled by the promotion of T. J. Haley, formerly assistant to Mr. Beard.

George T. Oliver of Pittsburgh has agreed to give to Bethany College of Morgantown, W. Va., \$10,000 for every \$50,000 raised by other means. Mr. Oliver is a graduate of the institution.

## National Organization of Structural Iron Manufacturers.

With a view to taking concerted action in case of demands by the unions which may be considered exorbitant, a national organization of manufacturers of structural iron, who also take contracts for erecting the iron framework of large buildings, was formed in New York last week. Similar action is likely to be taken by contractors for other branches of building, but it is said that it does not necessarily mean that a fight with the unions is expected.

The action of the structural iron workers is the outcome of a general strike of portable hoisting engineers on all the buildings in New York for which the American Bridge Company have contracts for the structural ironwork. There are only a few hoisting engineers on any one building, but the strike has made the house-smiths, bricklayers, carpenters, and others idle, and several thousand men are involved on about thirty large buildings.

The contractors say that the strike was on account of their refusal of a demand to pay the members of the Portable Hoisting Engineers' Union, whether the engines were working or not. The union holds that its members have a right to be paid while the hoisting engines are in a building, whether they are in use or not.

The formation of the employers' association was decided on at two meetings of structural iron workers who also take building contracts. Ninety per cent. of the trade was represented, including firms as far as Chicago. The first meeting was held in New York last Wednesday and the second one held later in Philadelphia.

Louis Allis, formerly of the Allis-Chalmers Company, has been elected vice-president and general manager of the Horseshoe Mining Company of South Dakota, with headquarters in Milwaukee, Wis.

# HARDWARE.

NOT only to the members of the various associations whose meetings are reported at such length in our columns will the record of the proceedings be of interest, but they will be perused, and some parts at least carefully considered, by merchants generally with a view to appropriating and applying in business the suggestions and information contained in the discussions and papers. In this way these annual gatherings of merchants who are brought together in the various organizations will contribute not a little to the literature of the trade and put within reach of those who are desirous of keeping in touch with the best methods a mass of information which, if made use of, cannot fail to elevate the tone and improve the systems of the retail merchants throughout the country. It is obvious, too, that these reports will be studied by other classes in the trade. A movement which comprises certainly 3500, and probably 4000, merchants commands attention from the jobbers of the country, whose customers these associated houses are, and from the manufacturers, from whom through one channel or another are supplied the goods which are handled by this multitude of merchants. When it is remembered that the membership of these associations is as a rule not made up of the minor, but of the leading, houses in the trade, of the progressive and enterprising rather than of the sluggish and inert, the importance of retail Hardware organization cannot be ignored by any students of trade conditions and tendencies. One of the questions, indeed, which awaits an answer is as to the extent to which this movement may develop and the changes which may be effected through its agency.

The unbiased students of these reports, and especially those who are in sufficiently close contact with the associations to understand the inside conditions and the ruling spirit, will be impressed with the varying tone which pervades them. There is a wide diversity in the manner in which the movement is entered into, for example, as regards the conservatism, the progressiveness, the enthusiasm, the wisdom and the spirit of fraternity which dominates their councils. While there is much in common in all the associations there is at the same time something approaching individuality in each of them. This, while it might be accounted for on general principles, is probably owing mainly to two great causes: First, the different conditions which prevail in the various parts of the country; and, second, the diversity of management owing to the influence of those into whose hands, sometimes almost fortuitously, the management of the association has fallen. This variety of feature, it is interesting to note, is not inconsistent with the purpose of the movement, and the various elements are being more and more wrought into a harmonious and homogeneous whole in the rapidly developing work of the National Retail Hardware Dealers' Association.

Without reflecting on any of the other associations it is proper to direct attention to that of California, not only as of recent institution, but more especially as illustrating in admirable manner some features of the movement more or less fully characteristic of the work in the other States. A reference to some of these may be in order as indicating the spirit and usefulness of the association as related to general trade interests, and especially to the difficult problems which are presenting themselves to retail merchants everywhere. Several

points will be suggested by a perusal of the report given in other columns of the recent meeting at San Francisco:

I. It will be seen that there is in this association a very general representation of the Hardware merchants of the State, not confined to any section but including merchants in all parts of the State. The association is thus a strong organization, entitled to speak and act for retail Hardware interests. The manner in which it obtains this thoroughly representative character by means of local associations which cover the greater part of the State, if not all, is a feature of special interest. These subassociations are affiliated with the State organization and their members meet together in the annual convention. This method of securing the adhesion of merchants in all parts of the State is deserving of careful consideration in other States where distance militates against the effectiveness of united work.

II. The report shows also the sensible and practical manner in which the problems confronting retail merchants are taken hold of. That these problems are frankly recognized and squarely met is a gain in itself. The disturbing influence of catalogue houses and department stores is admitted and methods are taken to minimize their mischief. The competition of the jobbers, which has apparently been less troublesome on the Coast than in many other portions of the country, is discussed and reference is made to the measure of success in repressing it, with a declaration more or less definite that efforts to eliminate it entirely are not to be abandoned. The question of Builders' Hardware as a troublesome line indicates that the Pacific Slope as well as the Atlantic, and, indeed, most of the territory lying between, find this a perplexing subject, for the difficulties of which no solution or remedy has as yet been discovered. Then, too, efforts to reduce to proper limits the competition between themselves by means of local associations, with understandings about prices on certain lines, show that the merchants in this progressive association are taking hold of difficulties that lie at their individual doors, and in attempting to correct abuses in general do not forget those for which they and their associates are immediately responsible.

III. The spirit in which all this is undertaken and carried on is eminently commendable. The relations between the jobbers and the retailers are apparently close and fraternal. Accordingly, while there is on the part of the retail association no lack of frankness and courage, grievances are taken up for conference in a reasonable and fraternal spirit. There is apparently a sincere desire to reach conclusions which will be favorable to the jobbing trade, provided this can be done consistently with retail interest. One of the important reports, it will be seen, indicates a willingness to buy goods from the Pacific Coast jobbers, instead of from Eastern sources, as has heretofore been done to some extent, provided this can be done at only a trifling advance in cost. But it is, of course, too much to expect that purchases will be made from the jobbers in any section merely out of kindly sentiment and sympathy, and the jobbers, who generally base their appeal for support on the service they render and the advantageous prices they are enabled to make, would be the last to expect any such consideration. The straightforward manner in which the retailers' rights are asserted, combined with this consideration for the interests of others, is a most admirable feature of one of the youngest and most successful of the associations.



## Condition of Trade.

The indications which were prominent soon after the opening of the year, of the resumption of activity in the purchase of goods, are being fully realized. Lines in which there were indications of weakness have, with few exceptions, stiffened up, and the general condition of the market is eminently satisfactory. A large majority of dealers throughout the country have found, as the result of closing their books incident to stock taking, that the past year was an exceptionally prosperous one. The condition of business has caused them to take a cheerful view of the future and with the advent of spring to enter upon a period of renewed activity with a high degree of confidence inspired by the conditions which prevail. The advance on February 20 in the price of Wire Nails and Wire has had the effect of encouraging rather than discouraging purchases in these lines. A satisfactory volume of business is apparently being enjoyed by all branches of trade.

### Chicago.

(By Telegraph.)

Among the important features of the week have been the advance in the price of Screws, the associated manufacturers now placing the discount at  $87\frac{1}{2}$  and 10, base, for Flat Heads, an advance of 20 cents per box in the price of Tin Plate, making the base price now \$3.87 $\frac{1}{2}$ , and an advance of 5 per cent. in the price of Baling Ties. The subject of transportation is the most annoying and most important difficulty with which manufacturers now have to contend. It is reported that 250 cars of Wire Fencing are ready for distribution, but no cars are available in which to make shipment. The same is true to a large extent of other manufactured products, covering Wire, Nails and various manufactured goods, including specialties. On March 2 the United States Steel Corporation, more directly the American Steel & Wire Company, entered into official possession of the Union and Sharon mills, and on the same date the Steel mill of the Illinois Company began operations at Joliet. Notwithstanding the difficulties in making shipments, new business continues to press upon manufacturers unsolicited. Most manufacturers are still handicapped because of the difficulty of obtaining ample raw material and fuel, but in some respects improvement is noted, and with more settled weather further improvement is anticipated. However, there seems to be a general opinion that more or less delay will be experienced in the receipt and shipment of both raw material and manufactured goods throughout the greater part of the calendar year, and jobbers and dealers are disposed to be forehanded in anticipating these drawbacks. In fact many dealers have ordered goods during the last six months from two to three months prior to the usual time of placing contracts. Beginning with March 1 there has been an increased movement in various goods for spring delivery, prominent among which are small agricultural implements, including Forks, Rakes, Hoes, Shovels, Spades, &c. Manufacturers of Saws and Edge Tools report orders booked for several months to come. There has been a larger volume of business in Heavy Hardware, including Bolts, Nuts, Rivets, Blacksmiths' Supplies, Bars, other Wagon material and structural goods. There has continued to be a good demand for Poultry Netting, Screens, &c., and a much larger movement of specialties, such as Washing Machines, Cutlery and Bicycles. There has also been an improved demand for cooking utensils, including Enameled Ware and Laundry Goods. Builders' Hardware has sold more readily, and with the already heavy bookings the prospect for prompt delivery is less bright than several weeks ago. Some liberal orders have been placed recently for Stove Pipe and metal goods for building purposes. Jobbers are distributing Lawn Mowers, Refrigerators and Ice Cream Freezers about as fast as received from the factory, while many shipments are being made direct to consumers. All in all the month of February has been very satisfactory so far as volume of business is concerned.

although there was some falling off during the third week in the month, and the month of March starts out with accelerated movement and a confident feeling.

### St. Louis.

(By Telegraph.)

While some slight decrease in the volume of business has been felt in the Hardware market at this point, it would seem that this condition is more essentially local than otherwise and is due largely to the weather and the facilities for transportation. The figures for spring trade are looming up in large volume, and the call for such lines as Screens, Screen Doors, Lawn Mowers, Garden Tools and various classes of Steel goods is along active lines. It is understood that the recent advance in the price of Wire Nails, Barb and Plain Wire has had the tendency to stimulate rather than check the activity in these lines. In taking up the States individually in order to analyze the trade situation, we find the prospects of a most encouraging character, with the possible exception of some localities in the Southwest. Builders' Hardware continues to be an important item, and it is not so much the lack of demand that is apt to disturb the jobber, but rather his inability to secure the necessary quantity of goods from the manufacturer. Very encouraging conditions appear to rule in the heavy department of the market and very favorable comparisons are being drawn with sales at this season during previous years. Prices all along the line are very firm and the disposition seems to be toward a higher rather than a lower range.

### Cleveland.

THE W. BINGHAM COMPANY.—The Hardware trade in all of its branches is in a flourishing condition. The great advantage that Cleveland jobbers have over most points is the excellent shipping facilities, many lines of railroads starting from Cleveland, and many of the principal trunk lines passing through our city. With the opening of spring we anticipate a large tonnage of shipments from Cleveland to the North and Northwest by water transportation. Real estate for homes and manufacturing sites is in great demand and with the opening of spring it is expected to bring about the greatest building boom in the history of the city. Statistics prepared, two years ago gave Cleveland 3700 manufacturing concerns of all kinds. It is estimated that this figure has grown to 4500, and it is predicted that there will be 5000 institutions of the kind by the end of the year. Three big manufacturing propositions are now seeking an entrance to the city. The railroads have been approached for sites with side track facilities. One man wants a site of 6 acres close to the railroad. A Plow making concern in South Bend, Ind., propose to erect a factory in Cleveland. A Bedford, Ind., company want a 10-acre site with shipping facilities. It is said that on an average more than 100 inquiries are made at the railroad offices every month for sites in this city. The blast furnaces, which are being built on the flats, represent an outlay of from \$3,000,000 to \$5,000,000 and will furnish employment to 3500 men. All the above goes to prove conclusively that Cleveland, on account of the large amount of goods manufactured in Hardware and other lines, is a good place to buy from, and customers, on account of the many railroads and water facilities, can be served promptly. The recent advance in Wire and Nails of \$2 a ton does not seem to check the demand, and orders are coming in almost as freely as they did before the advance. An immense tonnage of these goods will go forward from the Cleveland mills in the next 60 days. Collections are quite satisfactory, showing that the retail merchants are enjoying a good trade and are thereby enabled to discount their purchases promptly.

### Louisville.

W. B. BELKNAP & Co.—The market is very steady and there is continued good demand. The advances in Steel and Wire and the slightly stiffened prices in Steel and Iron Bars have begotten confidence, which is reflected in buying. The fact that there is no complaint about prices indicates that the supply of goods is by no

means in excess. It is quite difficult to get goods started and even more so to have them come through in reasonable time after they are once on the cars. This is an old complaint, however, and rather stereotyped of late.

This volume of business, too, is all the more surprising and gratifying since a large portion of the Southern country and the Mississippi Valley is under water. The heavy snow in the mountains, followed by warmer weather and rains, has brought every stream and river up to flood height. Locally, the effect is to shut off business, as digging fence holes in the bottom of a pond is dreary and unprofitable business, but this is the accepted time of the year to have floods if they are bound to be. The ground is becoming saturated in the natural fashion, and if the hydropathic treatment be not too severe and prolonged we shall reap the result in abundant crops in due season.

The dry spots in Texas, which have been white on the map for two or three years, are at last amply watered and this is accepted as a promise from nature that cotton and wheat and all other products shall be plenty from that wonderful producing State. In our own State, the discovery of oil is still an interesting and speculative topic. Mining and the transfer of mining lands are active; lumber business is booming.

It is well that nature takes her time to produce crops, else we should be for hurrying them on too fast, so impatient has man become for money making results.

The Kentucky Association of Retail Hardware Dealers met in Louisville the early part of this week. There was a good attendance. A theatre party and a banquet were tendered by the local jobbers and manufacturers.

#### Boston.

BIGELOW & DOWSE COMPANY.—After a baptism of fire which consumed our whole stock, thanks to our neighbors and the kind consideration of the manufacturers we have been able in less than three weeks to accumulate a new stock, which is quite as complete as the old. Our customers have proved their loyalty, as February sales will show but a slight decline from those of last year. Our warerooms and sales department are located at 16 Oliver street, and our offices and buying department at 141 High street.

It has been quite impossible to reply to all the kind words of sympathy and offers of assistance that have come to us from all quarters, all of which we most fully and gratefully acknowledge. One has to go through such an ordeal to fully know and appreciate the noble, generous and disinterested offers of help so freely made.

It is particularly gratifying to have so many kind evidences of the loyalty of our customers who have shown their kind feelings by their remittances and the orders they have held back for our salesmen.

Through it all the teachings of Masonry have been most beautifully exemplified and the bonds of brotherly love made stronger.

In July we are promised our old store at 229 Franklin street, and presumably in the rush of business the fire will soon be but an event of the past, but the kind words of encouragement from our friends can never be forgotten.

#### Portland, Oregon.

CORBETT, FAILING & ROBERTSON.—An interesting item in last week's bank statement that will be overlooked by most people, although it bears keenly on the present situation, is the fact that loans are now \$12,000,000 greater in New York than ever before. At previous high level deposits exceeded loans \$79,000,000. Now deposits are but \$13,000,000 in excess of loans. When one considers the watered issues that have been foisted on the market for the past five years, and with the loans now so nearly absorbed by deposits made on these watered securities, one is led to speculate as to how long present conditions will prevail.

Real estate the country over is advancing and should an era of speculation set in the drain on New York would be beyond their power to meet. Then what?

Trade during February has not held up with the phenomenal business that prevailed in January, although weather has been all that could be wished for. We have had an ideal winter and can hardly realize that there could be such a difference in climate as telegraphic reports indicate. We are as far north as Montreal, Canada, still roses bloom here until New Year's in the open and we can scarcely be said to have any snowfall or ice.

Every indication so far promises good crops for the year and that means a good business.

#### Omaha.

LEE-GLASS-ANDRESEN HARDWARE COMPANY.—The month of February closes with no new features in trade conditions. The general situation remains practically the same as outlined in our preceding reports. The country demand for Hardware and kindred goods continues to be fairly active, and with the spring season close at hand it is expected that a large business will develop suddenly and push the capacity of the jobbing trade to the utmost.

The country tributary may be reported as continuing in a very prosperous condition, and as long as there is plenty of business in sight, backed by favorable climatic as well as financial conditions, everything points to a large and rushing spring trade.

#### Nashville.

GRAY & DUDLEY HARDWARE COMPANY.—This locality, like the rest of the country, has suffered from a considerable amount of bad weather. During the month of February rain, ice and snow have been abundant. The roads in the country have been almost impassable in some sections, and salesmen have had a great deal of difficulty in traveling. All of this has naturally affected trade and has reduced the volume of business to some extent. Notwithstanding these drawbacks, we believe that the month of February will show an increase over the corresponding month of last year.

The movement in spring and summer goods continues to be heavy, and a great many orders are being taken for Refrigerators, Water Coolers, Freezers, Lawn Swings, Screen Doors, Wire Cloth, Poultry Netting, &c.

The whole South, and particularly this part of the South, is in a most satisfactory and prosperous condition. Farmers are nearer out of debt than ever before, they have more money to spend and are very apt to spend it. Most of the retail dealers are in splendid shape, and all of the best class of up to date merchants are carrying reasonably large, well assorted stocks of goods, are discounting their bills and are buying in better quantities and a greater variety of goods than ever before.

An advance of 15 cents per 100 pounds on Nails and all kinds of Wire and a number of other small advances have been made and prices are being well maintained.

### NOTES ON PRICES.

Wire Nails.—The nearer approach of settled weather and the advance in prices have caused those who had not provided for their requirements to send in orders. This addition to the large amount of business previously booked by the mills is causing apprehension of delayed shipments, if not of an actual shortage in Wire Nails. Quotations are as follows:

Jobbers, carload lots.....	\$2.00
Retailers, carload lots.....	2.05
Retailers, less than carload lots.....	2.15

New York.—The local demand for Wire Nails has shown an improvement since the first of the month. Merchants in the territory tributary to this point are sending in orders for carloads more freely than at any time since the first of the year. The following quotations are generally closely adhered to: Single carloads, \$2.20; small lots from store, \$2.25 to \$2.30.

Chicago, by Telegraph.—The recent advance in the price of Wire Nails has had little effect in decreasing the amount of new business offering, while specifications on old contracts are being received daily, with urgent re-



quests for quick shipment. But manufacturers find much difficulty in obtaining cars for shipment of all goods now ready for distribution. The jobbing trade has been fair, and the market has remained firm, sales being made on the basis of \$2.20 in carload lots and \$2.30 in less than carload lots, Chicago.

*St. Louis, by Telegraph.*—Since the advance went into effect the demand has been stimulated, and at this time the volume of trade is of considerable proportion. In less than carload lots, \$2.35 is quoted.

*Pittsburgh.*—Demand for Wire Nails continues heavy, the mills having entered very large contracts before the recent advance in prices was made, specifications for which are now coming forward. There is a good deal of difficulty in getting prompt delivery of Wire Nails, owing to the unsatisfactory railroad conditions, and also to the fact that the mills are well booked up. In view of present conditions a further advance in the price of Wire Nails would not be surprising, but on the contrary is anticipated by the trade. We quote: Wire Nails at \$2 in carloads to jobbers, \$2.05 in carloads to retailers and \$2.15 in small lots, f.o.b. Pittsburgh, 60 days, or 2 per cent. discount for cash in 10 days; for Galvanizing Nails 75 cents per keg is charged and for Tinning Nails \$1.50 per keg extra.

**Cut Nails.**—As announced in our columns last week, there was no change made in the price of Cut Nails by the Cut Nail Association at their meeting held on February 25. While some of the manufacturers thought an advance advisable, it was decided that it would not be judicious to make any change in prices at that time. The market is reported as being very steady at the following quotations: \$2.10, base, in carloads, and \$2.15 in less than carloads, f. o. b. Pittsburgh, plus freight in Tube Rate Book to point of destination; terms 60 days, less 2 per cent. off 10 days.

*New York.*—The local demand continues steady, and is moderate in volume. Quotations for carloads and less than carloads at the advance are as follows:

Carloads on dock.....	\$2.24
Less than carloads on dock.....	2.28
Small lots from store.....	2.35

*Chicago, by Telegraph.*—The local market has been without special activity, but there has been a fair movement and the market has remained firm, the association having reaffirmed previous prices. Quotations are on the basis of \$2.26½ in carload lots and \$2.36½ in less than carload lots for Steel, Chicago. Iron Nails are selling in a small way as high as \$2.50 per keg from store, Chicago.

*St. Louis, by Telegraph.*—A moderate demand continues in this market for Cut Nails and quotations in small lots from store are as follows: Steel, \$2.43 and Iron at \$2.55.

*Pittsburgh.*—The Cut Nail Manufacturers' Association met last week and reaffirmed February prices on Cut Nails for March shipment. The tone of the market is firm, and in view of the advance in price of Wire Nails, it was generally anticipated that prices of Cut Nails would also be put up, but the manufacturers evidently decided to await further developments in the market before taking such action. It is believed, however, that a slight advance in Cut Nails may be made when the time comes to fix prices for April shipment. Demand is good and there is still some difficulty in getting prompt deliveries, owing to shortage of Steel and congested condition of the railroads. We quote: Steel Cut Nails, \$2.10 base, in carloads and \$2.15 in less than carloads, f.o.b. Pittsburgh, plus freight in Tube Rate Book to point of destination, 60 days, less 2 per cent. off in 10 days. Iron Cut Nails take 10 cents advance over Steel.

**Barb Wire.**—The mills have a heavy tonnage of Barb Wire booked, and the market is firm at the recent advance in prices. Quotations are as follows, f.o.b. Pittsburgh, 60 days, or 2 per cent. discount for cash in 10 days:

	Painted.	Galv.
Jobbers, carload lots.....	\$2.30	\$2.60
Retailers, carload lots.....	2.35	2.65
Retailers, less than carload lots.....	2.45	2.75

*Chicago, by Telegraph.*—The Sharon and Union Steel Company mills passed into the hands of the United States Steel Corporation on March 2, and the mills of

the Illinois Steel Company began operations on the same day. Some improvement is also noted in the working of mills at other points, which eventually will relieve the overcrowded condition of the American Steel & Wire Company. The demand continues good and specifications on old contracts are heavy. The jobbing trade has been fair and the market has continued firm. Galvanized sells at \$2.80 in carload lots, and \$2.90 in less than carload lots, Chicago. Staples have been moving freely at \$2.35 in carload lots and \$2.45 in less than carload lots.

*St. Louis, by Telegraph.*—The jobbing trade is taking a good volume of business for Barb Wire at the advanced price. Preparations have been made for an active demand and affairs are opening up in an encouraging way. Painted is quoted at \$2.65 and Galvanized at \$2.95 in small lots from store.

*Pittsburgh.*—We note a continued heavy demand for Barb Wire, and the tone of the market is very firm. Heavy contracts were placed prior to the last advance in prices and the mills are now shipping out on specifications of these contracts. We quote as follows, f.o.b. Pittsburgh, 60 days, or 2 per cent. discount for cash in 10 days: Painted, \$2.30; Galvanized, \$2.60 in carloads to jobbers; Painted, \$2.35; Galvanized, \$2.65 in carloads to retailers; Painted, \$2.45; Galvanized, \$2.75 in small lots to retailers.

**Plain Wire.**—There continues to be a heavy demand. The market is firm, with no indication of lower prices. Quotations are as follows, f.o.b. Pittsburgh, terms 60 days, or 2 per cent. discount for cash in 10 days:

Jobbers, carloads.....	\$1.90
Retailers, carloads.....	1.95
Less than carloads.....	2.05

The above prices are for base numbers, 6 to 9. The other numbers of Plain and Galvanized Wire take the usual advances, as follows:

6 to 9	10	11	12	12½	13	14	15	16	17	18
Base	\$0.05	.10	.15	.25	.35	.45	.55	.70	.85	Plain.
	\$0.30	.35	.40	.45	.55	.65	1.05	1.15	1.70	1.85 Galv.

*Chicago, by Telegraph.*—There has continued to be a liberal movement on old contracts whenever it is possible to obtain cars, but a very large tonnage is awaiting shipment for which no transportation is available. New business continues embarrassing rather than otherwise, and the market remains firm at the recent advance. The jobbing trade has been fair and the market firm. Nos. 6 to 9 in carload lots are selling at \$2.10 on track and \$2.20 from store, Galvanized bringing 30 cents extra for Nos. 4 to 14.

*St. Louis, by Telegraph.*—In the market for Plain Wire jobbers report a good business, with the indications pointing to a satisfactory season's demand. In small lots from store No. 9 is quoted at \$2.25 and Galvanized at \$2.55.

*Pittsburgh.*—We note a good demand for Plain Wire, and the market is firm. The mills are working mostly on large contracts placed prior to the recent advance in prices. We quote as follows: Plain Wire, \$1.90, base, for Nos. 6 to 9 in carloads to jobbers; \$1.95 in carloads to retailers and 2.05 in small lots to retailers; Galvanized, 30 cents extra for Nos. 6 to 14 and 60 cents extra for Nos. 15 and 16.

**Axes.**—In accordance with the understanding which has prevailed among the manufacturers they have generally refrained from quoting prices until the opening of the present month, and accordingly on Monday circulars were issued and travelers entered the field with a view to taking orders for the year. There has been a good deal of curiosity in regard to the prices which would be announced, but in this matter the manufacturers are generally pursuing a conservative course and the market opens at the same prices at which contracts were taken a year ago, rather than at the somewhat nominal prices which were subsequently made mainly with a view to protecting the jobbing trade. The prices thus current at this time do not represent much of a break in the market. Manufacturers, out of deference to the interests of the jobbers as well as their own, are desirous that these prices be maintained, but it remains to be seen what the outcome will be in view of the earnest competition which is likely to characterize the market. The manufacturers are sending out their circulars and other advices in regard to their lines, and

in this connection it may be mentioned that the American Axe & Tool Company are sending out circulars in which they call prominent attention to the fact that their leader for 1903 will be their C. W. Hubbard's Patented Hollow Ground Axe in blue finish, a finish in which they are now putting the Axe on the market for the first time. The manner in which it is referred to by them indicates that they will make it a prominent feature of their trade.

**Binder Twine.**—It is understood that the blank contracts used by the harvester companies fix the time for fixing prices on or before April 1. It appears as if the full limit may be taken, as no announcement has yet been made. It is reported that in the West some small manufacturers and a few jobbers are asking from 10 to 11 cents for Sisal and Standard Twine, offering to guarantee the price in most cases. Some Eastern manufacturers are quoting 10¼ cents in carload lots, and 11 cents for carload lots, f.o.b. New York, and guaranteeing prices against their own decline or a decline in the prices of the International Harvester Company. Competition does not allow them to take orders at these quotations. It is reported that there will be less difference in price between Sisal and Manila grades than heretofore, as buyers will get more feet of Twine for their money, as compared with Sisal, instead of less.

**Screws.**—After a long period of demoralization in the prices of Wood Screws the manufacturers have come together again in a strong organization, which promises

to give regularity to prices. It is understood that all of the manufacturers of Screws, without exception, are parties to this agreement. The new discounts adopted embody, it will be seen, a material advance from the low prices which have been current. The announced discounts, which represent the price to the general trade, are as follows:

Steel:	Per cent.
Flat Head Bright.....	87½ and 10
Add 5 per cent. for Bluing.	
Round and Oval, Bright and Blued.....	85 and 10
Flat Japanned.....	82½ and 10
Round Japanned.....	80 and 10
Flat Tinned and Galvanized.....	82½ and 10
Round Tinned and Galvanized.....	80 and 10
Flat Bronzed.....	82½ and 10
Round Bronzed.....	80 and 10
Flat and Round Brass or Bronze Plated.....	77½ and 10
Flat and Round Nickel Plated.....	77½ and 10
Brass:	
Flat Head Brass.....	85 and 10
Round and Oval.....	80 and 10
Flat and Round Nickel Plated.....	75 and 10
Bronze:	
Flat Head.....	77½ and 10
Round and Oval.....	75 and 10

This action on the part of the manufacturers has been, in a general way, anticipated by the trade as likely to occur as a reaction from the unprofitable prices which have been prevailing, and in anticipation of it the jobbing trade and the larger retailers have been purchasing quite freely, so that stocks of goods on hand throughout the country are of good volume. It remains to be seen whether or not the competition between the jobbers will result in material shading of the manufacturers' regular announced prices.

## Pennsylvania Retail Hardware Dealers' Association.

THE second annual meeting of the Pennsylvania Retail Hardware Dealers' Association opened at the Monongahela House, Pittsburgh, Pa., at 11 o'clock Tuesday, March 3. In the absence of the president, who was delayed on the way by one of the transportation difficulties which are of late so frequently experienced at that busy center, George W. Hackett of Allegheny City was chosen chairman, *pro tem*. The president, G. L. Moore, however, soon arrived and took the chair. The session was an executive one and devoted mainly to organization and preparation for the convention's work.

The minutes of the last meeting were read by the secretary, J. E. Digby, of McKee's Rocks, and on motion duly approved. The report in regard to the membership was listened to with interest, and indicated a slight growth in the number, including some representative concerns. The roll at present is as follows:

### Association Membership.

W. A. Buckholdt, Charleroi.	J. S. McKean & Sons, New Kensington.
J. H. Bowers, Charleroi.	C. H. Miller Hardware Co., Huntingdon.
F. A. Bidaux, Titusville.	Samuel Munnell, Canonsburg.
T. L. Berkey, Bolivar.	Mendelssohn-Clairton Hardware Co., Willson, Pa.
S. S. Bryan, Titusville.	Reid Bros., Braddock.
Geo. A. Bodine, Bradford.	Geo. J. Rudolph, Pittsburgh.
John H. Coulter, Brownsville.	Geo. W. Rowbottom, Jr., Allegheny City.
A. Q. Casselberry, Pittsburgh.	A. M. Stevenson, Renova.
F. J. Cover & Son, Meyersdale.	J. M. Selheimer, Lewistown.
E. H. Darsie, Donora.	Jno. W. Seaman, Washington.
Dickson & Co., New Castle.	M. G. Spragg & Son, Donora.
Digby & Smith, McKee's Rocks.	Shipley Hardware Co., Meyersdale.
E. D. Everts, Corydon.	Schell & Penberthy, Monessen.
Fulton & Maggini, Braddock.	C. O. Schroyer, Dawson.
J. F. Frye, Belle Vernon.	C. N. Savage, California.
L. C. Fox, Irwin.	P. J. Sloterbeck & Son, Fayette City.
Albert M. Gregg, Monongahela City.	John Steuler, Millvale.
Greensburg Hardware & Supply Co., Greensburg.	L. H. Salisbury, Albion.
Gunn Tool & Supply Co., Pittsburgh.	Charles H. Steele, Charleroi.
J. B. Holderbaum, Somerset.	Smith Hardware Co., Kane.
E. Hare & Son, Fayette City.	Geo. V. Thompson & Co., Mt. Jewett.
Geo. W. Hackett, Allegheny City.	Taylor Hardware Co., Allegheny.
John F. Howe, Freedom.	C. W. Trissinger & Co., Berlin.
Geo. H. Hegner, Sewickley.	Wilson Hardware Co., Belle Vernon.
Kirk & Smith Co., New Castle.	Williamsport Hardware & Stove Co., Williamsport.
L. F. Kellerman, McKee's Rocks.	Ermer Hardware Co., Galeton.
Kline & Co., Williamsport.	Wickenbliser & Harman, Coraopolis.
Samuel McKnight, Allegheny City.	Craig Hardware Co., Mars.
T. S. McCurdy & Son, Monongahela City.	
E. M. Mardoff & Co., Brownsville.	
Geo. L. Moore, Brownsville.	

### Insurance.

An interesting report was made by C. H. Miller, Huntingdon, Pa., vice-president of the Hardware Deal-

ers' Mutual Fire Insurance Association of Pennsylvania, which was organized last July, and has already \$300,000 insurance in force. Mr. Miller's report was as follows:

### Mutual Fire Insurance.

When our secretary kindly asked me to make an address at this meeting I declined, saying that what time I could devote to the association I preferred to center on the work of the insurance company, with which I am identified, and leave the other work of this convention to more capable hands. His reply came so promptly, suggesting that I read a paper on the subject of Mutual Fire Insurance that I could not well decline, and so it is he rather than the speaker that should make an apology for this layman's effort on a subject which, directly foreign to the Hardware business, is of such great importance to us all, in that it concerns the saving of many thousands of dollars per year to those who care to avail themselves of the company's usefulness.

### HARDWARE DEALERS' MUTUAL FIRE ASSOCIATION OF PENNSYLVANIA.

Coming to the convention in this house one year ago, burning with a sense of injustice received at the hands of a stock company in the adjustment of a fire loss sustained from a fire across the street, I was prompted to suggest to the convention the propriety of organizing a mutual fire insurance company for the Hardware dealers. The outcome of that suggestion is the "Hardware Dealers' Mutual Fire Association of Pennsylvania," which opened their books for business October 1, 1902. From the outset this company were received with favor by the Hardware dealers of the State, both wholesale and retail, and that this company have prospered so greatly is due more to the fact that they found a responsive feeling in the trade rather than to the persistent efforts of their management.

### PERFECTION OF MUTUAL INSURANCE.

The highest perfection of mutual insurance is to be found in the New England mill mutuals. The organization of these companies dates back a period of some 50 years, and combined they represent over \$1,000,000,000 of insurance in force, on which there is an immense annual saving to their members. The policy of these companies is directed by the most able minds interested in the insurance business, and the president of the leading one—the Boston Manufacturers' Mutual Fire Insur-



ance Company—Edward Atkinson, of Anti-Imperialist fame, who has been associated with this company for a period of 35 years, has published a book, "The Prevention of Loss by Fire," which is well worth reading by any one interested in adopting the proper means for the protection of his own property against fire loss. These companies are powerful and far reaching, and have possibly done more toward the matter of the building of fire proof structures and the adoption of proper precautions against the origin and spread of fires, than the combined efforts of all the stock companies doing business in this country to-day. They themselves insure only risks that measure up to a certain high standard; the buildings must be properly constructed and all necessary precaution must be observed in the operation and conduct of the business to guard, first, against the origin of fire, and, second, against the spread of fire if once started. Their risks must all have automatic sprinklers extending to every nook and corner of the property. This policy has been the means of greatly reducing the fire loss, which is the first cost of insurance.

#### THE STANDARD AIMED AT.

That mutual companies doing business with a general line of stores such as our own could enforce such rigid



CHARLES HERBERT MILLER.

rules and reduce the fire loss to such a minimum is hardly to be considered seriously, but that it can in a measure approach this is the hope and aim of the management of our company. By a careful selection of risks both as to moral and physical hazard, and by requiring our members to observe certain ordinary precautions and possibly later by the adoption of certain fire appliances, we hope to keep the fire loss of our company so low that the rate of loss in the hardware trade will be very much below what it is to-day. An extra hazardous risk is dear at any price and no matter what the rate may be it can find no place in our company. It is not our purpose to adopt the policy of stock companies, which is practically a system of betting that bad risks will not burn.

#### STOCK COMPANIES.

In addition to the saving to be effected by what we might term "preferred risks," a great saving will result from economy in the management of the company. Roughly speaking the expenses of a stock company amount to 50 per cent. of the premiums, then the stockholders must have a fair return for the capital invested and the stock in many of the leading companies sells at such a high premium that they must find it exceedingly profitable. In fact the stock of one company at par value of \$100 sold recently at \$2500 per share. When great conflagrations sweep over a district, involving losses of millions of dollars, the stock companies re-

spond by arbitrarily raising the rates throughout the entire country, as we have all recently witnessed. This last increase of 25 per cent. was the direct result of the disastrous fires at Paterson and Waterbury. The companies have made no secret of this fact. Is it not fair then to conclude from these facts and premises that in a mutual stock company properly organized and wisely managed with scattered risks, the cost of insurance to its members should not exceed one-half the cost in stock companies?

#### WHY SOME MUTUAL COMPANIES HAVE FAILED.

To those who are skeptical and timid regarding mutual companies, by reason of many failures along this line, let me suggest that they make a study of the matter and they will learn that these companies have failed not because they were mutual, but because they were not the right kind of mutual companies. In other words their plan of organization or management or both were at fault. Their plan was at fault because they did not have any cash in the treasury with which to meet losses, but depended on assessing their members after the losses had occurred, and having no collateral with which to secure the payment of their assessments, they were put to continual expense in litigation in the attempt to collect same which finally ended in the refusal of the insured to meet their obligations and consequent collapse of the company. Their management was at fault in the selection of their risks. An examination of the by-laws and an inquiry into the management of successful mutuals will show the difference.

#### PRINCIPLE OF MUTUAL INSURANCE.

The principle of mutual insurance is embraced by the management of some of our colossal organizations and corporations of to-day. Take the Pennsylvania Railroad Company for an example. They carry all their insurance within themselves, setting aside each year a sum to cover losses by fire. Another striking example is the International Navigation Company, who have decided to insure their own vessels. If corporations of this character should find it profitable to carry their own insurance, why should not an association of Hardwaremen find it profitable? Each merchant cannot carry his own risk, but by associating with his neighbors and mutually agreeing to bear any loss that may occur, he obtains the protection at the actual cost of same. The stock companies are making money off of you and me. Why not make money ourselves? Why not put in our own pockets that dividend?

As the speaker sees this proposition there is just one more point to be considered—viz., the management. The management of a mutual company is in the hands of their members, who annually elect a Board of Directors, who direct the policy of the company. The most important thing for them to consider is the election of a secretary, for upon him devolves the actual work, which is clearly that of a professional man, schooled in the insurance business. In the selection of the man to fill this position our company differ from that of several other mutual companies who have recently been organized in the different States, who seem to have taken their secretary from among their own members. The Hardware Dealers' Mutual Fire Association of Pennsylvania selected a man who has not only been connected with the insurance business all his life, but who also assisted in the organization of one of the most successful mutuals doing business in this State—viz., the Pennsylvania Millers' Mutual Fire Insurance Company. Mr. Simpson, our secretary, brings to his work a mind of wide experience in the insurance business in general, together with a peculiarly fitting experience in mutual insurance. This policy may be a little more expensive at the outset, but will doubtless be the means of great saving in years to come.

In conclusion, allow me to make just one plea for more business. Examine our by-laws, get acquainted with the personnel of the officers, take advantage of this opportunity to meet our secretary, and file your application with us, and unite in making this a co-operative protective association as well as a mutual fire insurance company.

**Mr. Fernley's Address.**

It affords me a great deal of pleasure to bring to you to-day the greetings of the National Hardware Association of the United States and to state that the association which I represent has the most kindly feeling toward this association, together with the various State retail Hardware dealers' associations throughout the country.

We have noted with great pleasure the rapid growth of these organizations and have and will continue to do everything in our power to aid the retail Hardware merchants of the country in their effort to uplift the standard of the retail Hardware business through the medium of trade associations.

Undoubtedly agencies are at work which if unchecked will be successful in making the retail Hardware business in future years much less profitable than it has been in the past. We do not mention the particular agencies to which we allude because they are well known to you, and the repeated naming of them only has the effect of advertising them unnecessarily.

A most respectful and in every way acceptable communication was received at the New Orleans convention of the National Hardware Association in November last from the National Retail Hardware Dealers' Association.



T. JAMES FERNLEY.

tion, which communication called the attention of the members of our association to some of the difficulties which the retail Hardware dealers of the country are compelled to face. The communication was given very serious consideration and was very freely discussed. At the conclusion of the discussion the following resolution was unanimously adopted:

*Whereas*, It has come to our attention that statements have been made by some manufacturers that there have been cases in which members of our association have bought goods from manufacturers or have permitted the use of their names in connection with such purchases, and that such goods have been furnished to certain catalogue houses without a legitimate jobbers' permit.

*Resolved*, That we cannot believe that any member of this association has been guilty of such vicious conduct.

*Resolved*, Further, that we hereby instruct our secretary to make a full investigation of such charges of this character as may come to his knowledge, and to report the result of his investigation to the Executive Committee at the earliest possible day thereafter.

A copy of this resolution is in the hands of the most efficient secretary of the National Retail Hardware Dealers' Association, and as secretary of the National Hardware Association, I stand ready in every instance to investigate charges of the nature alluded to; and while we have nothing in the constitution and by-laws of the National Hardware Association providing for the dismissal of a member, we want to assure you that some door will be opened and opened quickly for the exit of

any concern which pursues a course so antagonistic to the interests of their best customers. Since the placing of this resolution in the hands of the secretary of the National Retail Hardware Dealers' Association we have heard of no complaint regarding members of our association.

As I stated to you a year ago, there are a few firms engaged in the wholesale Hardware business not connected with our association, and if in the future you hear of jobbing houses being the source of supply for those concerns, who would destroy your profits, I ask that you make very careful inquiry as to whether such parties are members of the National Hardware Association or not.

I now hand the secretary of your association a list of the members of the National Hardware Association and will give any member of your association a similar list who may be disposed to write for it.

I simply come here to-day to assure you that the members of the National Hardware Association can be counted upon by you as strong allies. We do not come seeking your business; that is an item which will take care of itself. If the members of your association prefer to do business with those who will not support them and those who will make it possible for improper agencies to demoralize their markets, it is their privilege to do so. I assure you, however, that it is very annoying to the members of the National Hardware Association to learn that the goods of a manufacturer upon whom they have brought influence or upon whom your own or the National Retail Hardware Dealers' Association has brought influence to have the distribution of goods confined to the proper channel, reach these catalogue houses through jobbing houses not members of the National Hardware Association.

Our organization to-day is stronger than at any time in its history, and this strength is yours, and you have but to command it. We take absolutely no action which is inimical to the interest of the retail Hardware dealers of the country. We enter into no price agreements and never have done so, our object being to elevate the standard of doing business and to create more cordial relations between members of our association and the retailers, manufacturers and distributors of Hardware.

**Committee of Arrangements.**

A report was made by J. E. Digby, chairman of the Committee of Arrangements, and especially in regard to the entertainment provided for the delegates. This included seats at the opera Tuesday evening and a banquet to be followed by dancing on Wednesday evening. This entertainment was courteously furnished through the subscriptions of the jobbers and manufacturers of Pittsburgh.

**Address of the National President.**

The principal address of the afternoon session was by H. G. Cormick, president of the National Retail Hardware Dealers' Association, who spoke in a most interesting and stimulating manner in regard to the work of his association and of the State organizations as uniting in it. He pointed out some of the things which have already been accomplished, but dwelt more at length on what remains to be done and the lines on which efforts are to be made. An address was also made by R. R. Williams, Hardware editor of *The Iron Age*, after which there was a very interesting discussion in regard to association work, in which the interest and enthusiasm of the members was manifest. So much engrossed were the members in this discussion that the paper of J. F. Frye was deferred until Wednesday.

**Time and Place of Next Meeting.**

There was a general feeling among the delegates that the date at which the meeting was held this year was too late, and that the attendance would have been considerably larger if the convention had fallen upon an earlier date. It was also thought desirable to hold the next convention at a more central point in the State, and in view of these considerations it was decided that the next annual meeting should be at Williamsport on the third Tuesday and Wednesday of February, 1904. A very hearty invitation to this effect was extended by



James N. Kline of that city. The meeting then adjourned until Wednesday morning at 10 o'clock.

### WEDNESDAY MORNING SESSION.

The convention met in open session on Wednesday morning with the representatives of jobbers and manufacturers as well as members of the association in attendance. The principal address was to have been made by T. James Fernley, but he was delayed on the way and did not arrive until the session had closed. H. G. Cormick was called upon to speak in regard to the work of retail organization, and made a most interesting address. He was followed by a number of other speakers representing the varied interests, and the session proved a very satisfactory one.

### NEW YORK STATE ASSOCIATION OF RETAIL HARDWARE DEALERS.

THE first annual convention of the New York State Association of Retail Hardware Dealers will be held next week, March 9, 10, 11 and 12, at the Astor House, New York City. On Monday afternoon a meeting of the board of officers will be held. Tuesday morning the Board of Directors will hold a meeting, when a number of committees will be appointed.

The convention proper will open on Wednesday morning at 10 o'clock, when an address of welcome will be made by Geo. H. Sargent of Sargent & Co. President Hull will respond on behalf of the association. After roll call committees will be appointed, after which there will be a general discussion. At the afternoon session the feature will be a reception of guests of the association.

On Thursday morning the annual address of the president and the annual report of the secretary will be presented. Officers will also be elected for 1903, followed by discussion of business topics. In the afternoon Henry R. Towne of the Yale & Towne Mfg. Company will address the association. There will also be an address by H. G. Cormick, president of the National Retail Hardware Dealers' Association. The contents of the Question Box will then be taken up and a general discussion ensue.

The programme is thus an interesting and attractive one, and it is hoped that a large representation of the retail Hardware trade of New York State will be present. A cordial invitation is extended to all Hardware merchants, whether members of the association or not, to come to the convention.

### REQUESTS FOR CATALOGUES, &c.

Kramer, Shanahan & Kramer, St. Joseph, Mich., are a new firm who have lately entered the general Hardware and Paint and Oil business. They are also manufacturing Tin, Sheet Iron and Copper Ware. They request catalogues and quotations from manufacturers in the above lines.

Trolinger-Price Hardware Company have purchased the business formerly conducted by Cassell & Pryor, at Pulaski, Va. The new proprietors expect to carry on a wholesale and retail business in both Light and Heavy Hardware, and will be pleased to receive catalogues, price-lists, &c., from manufacturers.

C. E. Owens, Granite Building, Rochester, N. Y., is representing a number of manufacturers to the consuming manufacturing trade, and is desirous of receiving catalogues and discount sheets from other manufacturers relating to products and specialties which will be of interest to such trade.

On the morning of the 20th ult. the large hardware establishment of the M. J. Carnahan Company, Leogootee, Ind., with its contents, was burned to the ground. The company would value catalogues and price-lists from manufacturers of general hardware, stoves, farm implements, &c.

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## Kentucky Retail Hardware and Stove Dealers' Association.

**T**HE third annual meeting of the Kentucky Retail Hardware and Stove Dealers' Association was called to order by the president at 2 p.m., February 24, in the Liederkrantz Hall, Louisville.

About 50 members were in attendance, and 19 new members were enrolled at this session.

H. G. Cormick, president of the National Association, and W. P. Lewis, president of the Indiana State Association, were guests of the association. Both gentlemen were called upon to address the meeting, and responded with words of wisdom and encouragement.

### Committees.

The following committees were appointed:

**NOMINATIONS:** J. R. Sower, Frankfort; A. Steibler, Owensboro; A. A. Greif, Vine Grove; James Lewis, Greenville; W. P. Ray, Stithton.

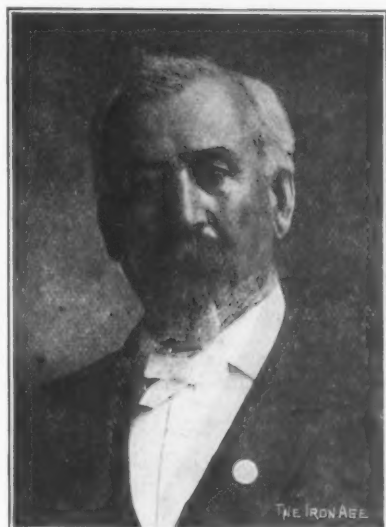
**RESOLUTIONS:** U. S. Shacklett, Fulton; A. B. Durham, Danville; J. C. Frederick, Owensboro; Jos. Knapp, Louisville; T. L. Mahan, Lawrenceburg.

**ORDER OF BUSINESS:** Mr. Chenault, Mt. Sterling; Mr. Van Deren, Lexington; Samuel Korb, Louisville.

The convention adjourned until Wednesday morning.

### President's Address.

The first business on Wednesday morning was the appointment of Joseph Knapp as sergeant-at-arms. W.



W. P. OLDHAM, President.

P. Oldham made his annual address as president, as follows:

At this the third annual meeting of the association. I desire to express my thanks for the honor conferred upon me at your last meeting. The Hardware business has become an important factor in commercial affairs. A successful Hardware dealer is, of necessity, a man of intelligence and resources. He must exercise judgment in the selection and arrangement of his stock and must be able to explain to the contractor, the machinist and the farmer, who are his principal customers, the proper application of the articles he sells them. There is no mercantile business to-day that combines a greater list, or makes stronger demands of a successful business man than Hardware.

### IRON IS KING.

Half a century ago, when houses were built of hewn logs, and the farmer cut a forked stick to handle his hay, when cooking was done in a fire place over a wood fire, the Hardware business was a side issue. Conditions have changed. In the ante-bellum days it was the boast of the Southern people that cotton was king. To-day Iron is king. Iron and its products enter more largely into the commerce of the world than any other commodity. It is

the great civilizer. It spans this great American Continent, and connects New York with San Francisco. It brings the nations of the world in closer touch, and carries civilization to the remotest parts. Every dealer in this commodity becomes an integral part of the whole and bears a certain responsibility.

From the Iron industry have sprung some of the most gigantic consolidations in the history of commerce. Millions of dollars have been centered in department stores and catalogue houses making products of Iron their leaders. Manufacturers in their zeal for a larger volume of business, in these times of unprecedented prosperity, have strained every nerve to increase their output; placing their goods wherever a purchaser could be found, regardless of the interest of those who have done the most to maintain them. So numerous have been the inroads on our trade that organization and co-operation have been imperative.

Owing to the short time this organization has been in existence not as much has been accomplished as could be hoped. In States where the State organizations have been well established much has been done, noticeably in New York, where catalogue houses were making railroad agents and postmasters their solicitors. The secretary of the New York State Association took the matter up with the railroad officials, and the practice was stopped.

It must not be expected that the secretary can do it all. Without your assistance he can do but little. It is impossible that he can know what is transpiring throughout the State without your assistance. If the

### JOBBER OR MANUFACTURER SELLS YOUR FARMER

a thousand pounds of wire, your blacksmith a set of tools, or your customer an air-tight stove, report the sale at once to your secretary, giving the name of the seller, what and when sold.

We all have our pet houses. What may be my favorite house to buy from may be the one that gives you the most trouble. If so report them to your secretary. If your secretary fail to get satisfaction, let him at once report to the Secretary of the National Association. If he fails it will be reported in the *Hardware Bulletin*, through which I have knowledge of the facts.

In this connection permit me to suggest that every member of this association should be a subscriber to the

### NATIONAL BULLETIN.

published at Argos, Ind. It is the official *Bulletin* of the National Retail Hardware Dealers' Association, and should be in the hands of every member of every State Association. And I would further suggest that it would not be a bad policy to amend our by-laws so as to increase the membership fee \$1, and authorize the secretary to forward the amount to the *Bulletin* as a subscription to each member. It is only through this medium that we can fully understand what is being done. If our associate organization is a success, we must be aggressive. Assist your secretary. Report to him every thing that he should know. Do it yourself. Do not wait for the other fellow. This association work is a part of your business—a part of your profits. Go at it with the same determination to succeed that you go into your store, and by the end of the year you will find your profits have increased.

It is always pleasant to look on the bright side of things. It is pleasant to see the good feeling that exists between the National Retailers' and Jobbers' National Associations. Working in harmony with the same general purpose success is assured. The jobbers' interest is our interest, our interest should be the jobbers' interest. Let us push our association work until every dealer in the State is with us. I have the first dealer yet to see who attends one of these meetings and does not become a member. At the last meeting two young men from the same town, in the same general business, took membership. I was struck with the good feeling that existed



between them. They had more the appearance of partners than competitors. We should all be on the best of terms with our competitors. If we have a leisure hour in the evening we should feel as free to walk in and spend that hour with a competitor as with a druggist or grocer. Do not be afraid to discuss your trade with him. Give him your confidence, then he will give you his. If you have a customer who is about to best you, let your competitor know it, he in turn will tell you some one else who will best you. If you know a catalogue house, a manufacturer, or jobber who is shipping goods to your

mutual insurance at a considerable length and has given a very exhaustive review of the subject.

#### Secretary's Report.

Paul Wagner's report as secretary was as follows:

Old Father Time has again turned his globe, and the third annual meeting of the Kentucky Retail Hardware and Stove Dealers' Association is upon us. Again we are assembled to review our grievances, and also to tell one another how we have profited by a membership in this association.

That we and all have "trouble" of some kind in our business, and that we have also already received, or soon expect to receive, some relief is proven by your presence here to-day. Should the attendance at these meetings be not up to expectations, we can expect the Kentucky retailer to be having "little trouble." If a great calamity happens in your vicinity, the crowds that gather are very large, and often excited and anxious, and cool and level heads and steady hands are in great demand to avoid a second calamity sometimes more appalling than the first.

So while we may have come here to-day with anxious expectations, justly writhing under the lash of unfair business methods pursued by unscrupulous, merciless manufacturers, jobbers, catalogue and department houses in, I might say, their combined efforts to throttle the retail merchants of the land, let us stand firmly our ground with a cool and determined manner, pursue the proper method of making our purchases, and also disposing of our wares.

#### WHEN A MANUFACTURER OR A JOBBER

tells you that he is your friend, that he will protect you whenever he can, that he will delight to see you getting along so nicely, and then deliberately sells his wares to a catalogue house (I care not at what price) he tells a—well, he is jollying you. But it was not my intention to write a paper upon this subject, though it is broad enough to write books about.

At our last meeting I reported a membership of 52; since then 14 new members have been added, and three of the old ones have retired from business, having a



U. S. SHACKLETT, First Vice-President.

customer, let your secretary know it; it may be worth something to a brother dealer. This is association work.

Article I, Section 2 of the constitution says: "The object of this association shall be the mutual benefit of the Retail Hardware dealers of Kentucky, by promoting their interest and securing their friendly co-operation." Unless we have that friendly co-operation our organization is of little worth.

A prominent manufacturer said "the greatest enemy of the manufacturer is some other manufacturer who is unprincipled or unbusinesslike in his methods." If we are withholding some information that should be known to the association, we are violating the purpose of the organization.

#### MUTUAL FIRE INSURANCE.

Before closing I desire to call your attention to the subject of mutual fire insurance. The recent advance of 25 per cent. by the old line companies, the fact that there are but few independent companies operating in this State, renders mutual fire insurance almost imperative. Yet in our opinion mutual insurance should be National instead of State. Ohio, Minnesota, Pennsylvania and other States who have adopted mutual insurance seem well pleased with their State organization, and present some very enticing figures. Michigan, however, at their last meeting reported unfavorably on mutual insurance. The chief advantage of a National insurance over the State would be the great scope of country over which the risks would be scattered, a larger amount of business can be handled at a less per cent. of expense and enable active officers prohibiting too great risk on any one stock whereby the safety of the insured would be impaired. Scattered risks and limited policies on stocks will preserve the life of mutual insurance. So important has this method become of writing limited policies that it is difficult to get any company to write more than \$2000 on one risk.

Hardware within itself is a very safe risk to write, yet we are required to pay one-fourth of a cent more than dry goods and groceries. Mr. Lewis in his address to the National Association has gone into the subject of



JOSEPH C. KIRCHDORFER, Second Vice-President.

total membership of 63, and six applications received within the last few days.

You will see by this that my ambition to increase the membership to 100 during the year 1902 did not materialize, and will possibly have to be extended to our next meeting.

During this, my second term of office it became my duty to answer 88 letters in all. Of these, 23 letters were from the editors of trade papers, 27 from secretaries and officers of the National or other State associations, 38 letters from members and retail merchants

of the State. Six grievances were brought to my attention by members of this association, and while some of these were adjusted satisfactorily, I have one complaint in particular to which I will call your attention later on, upon which I will demand action by the association. These manufacturers were guilty of entirely ignoring a letter, asking for explanation written to them by your humble servant in a polite and businesslike way.

Besides answering the letters above mentioned, we sent out during the month of June 500 pamphlets, containing the report of our second annual meeting, which were so generously furnished us by *The Iron Age*.

The first week in February we sent out a circular letter to every retail Hardware merchant in the State, the following week, a letter to every member of this association, besides about a dozen to "ripe," prospective members, and on February 21 we mailed to every dealer in this city (member or no member) an urgent invitation to be with us these days. This makes a total of almost 1200 circulars and letters sent out during the year.

I will leave it to the members to judge if our combined efforts and labors are justified by their reward.

I am grieved to report the death of one of our members, P. Koenigstein, of the firm of P. Koenigstein & Son. Mr. Koenigstein was one of the oldest dealers in this city (Louisville), but lately, with his son, conducted a retail Hardware & Stove business at Eminence. He was known for his fair and honest dealings with his



PAUL WAGNER, Secretary.

fellow men, and it was to me a pleasure to personally come in near relationship with him on business matters.

#### GETTING UP A PROGRAMME.

I will take the liberty of calling the attention of the Executive Board in particular, and of all members in general, to the advantage of having a regular fixed program prepared at least 60 days before the meeting. I would have attempted to accomplish this task unaided, had my health this Fall and Winter allowed.

In order to successfully accomplish this it is necessary that quite a number (not only a few) of our members report to the secretary what part they can take on such a programme.

Give us a little talk or a brief address upon any subject that may be of interest, and one that you have given some thought.

You can also assist your association materially by sending your secretary from time to time the name of a prospective member, then in a reasonable time write your friend again, asking him if he has joined the association, and if not, why not.

Prompt payment of yearly dues is an imperative necessity, if association work is to be carried on successfully, and unless carried on that way it may as well be abandoned.

Come, let us assist our future secretary all we can,

and place Kentucky in the front ranks in the National Retail Hardware Association.

#### Report of Delegates to National Convention.

J. C. Frederick made the following report on behalf of the delegates to the last meeting of the National Retail Hardware Dealers' Association:

At the last meeting of this association your secretary, Mr. Wagner, and myself were elected to represent Kentucky at the National convention, held at Chicago on March 19 and 20, 1902. It gives me pleasure to report that I attended that meeting and was made happy by finding there Mr. Wagner, together with Jos. C. Kirchdorfer, who had arrived before me. We were surprised and delighted with the personality and character of the men that represented the various State associations. They would do honor and credit to any deliberative body of this country, and no one could witness and listen to the deliberations of that assembly without being firmly convinced that the interests of the retail Hardware trade were in safe hands, and that great good would be bound to follow.

#### THE QUESTIONS DISCUSSED.

It is my purpose to give you an outline of the questions there discussed in as brief a manner as possible. Many subjects were presented, but of greatest importance to my mind were those of grievances, Parcels Post bill and mutual fire insurance. Of first importance I hold that of grievances, under which head I naturally place the various complaints made against manufacturers who place their goods with the mail order houses and also sell direct to the consumer, and those jobbers who are not content to sell their goods to the dealers, but are so considerate of his welfare that in their fear of the dealer overworking himself they try to relieve him by selling to his customers also.

#### THE GOOD MANUFACTURERS AND JOBBERS.

However, it was particularly gratifying to hear the communications and reports from the number of manufacturers and jobbers who, recognizing the justice of the retail trade's demands, have pledged themselves to sell their goods only through legitimate channels and do all in their power to keep them out of the hands of catalogue houses.

#### RETAILERS POWER AND INFLUENCE FELT.

I wish every member of this association could have heard the reports from the different States, that showed so plainly and forcefully that the retail Hardware dealers, through their associations, by concentrated action, are making their power and influence felt; that manufacturers alike are awakening to a realization of the fact that they must take heed of our complaints, of the abuses from which we are suffering, and that their own best interests will be conserved by rectifying them.

#### UNITED WE STAND, DIVIDED WE FALL.

It would encourage and stimulate you to work for these organizations, and you would feel that no goods upon your shelves paid you as handsome a percentage of profit as the fee and time invested in your association. You would more than ever recognize the truth and beauty contained in the motto of our own beloved "Old Kentucky," "United we stand, divided we fall," and I think it would be a most appropriate motto for the National Association.

The influence of the retail organization movement is beginning to make itself felt in at least one particular. The interference with the retailer's business by the jobbers and manufacturers, who go to his customers to dispose of their goods, has long been and still is a grievance of which the retail merchant complains. It is noticeable, however, that there is now much less of this in the West than in the East and South. It is more than a coincidence that the States where this interference has been diminished are those in which retail organization has brought the merchants together, and given emphasis to the claims which they make that their business shall not be encroached upon by those from whom they purchase their goods. Not long ago it was a frequent thing at gatherings of Hardware merchants in the West to hear many complaints against jobbing houses who had taken away their trade, as sales were made direct to consumers in

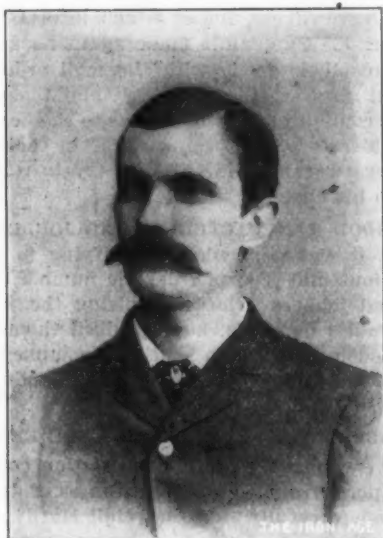


their territory; but at the recent meetings of most of the associations, while this matter was referred to, it was evident that the evil had been greatly diminished and that the jobbers were prompt to remove cause for complaint when the matter was brought to their attention officially by the representatives of a strong organization. In the East, where retail Hardware association is less developed, there is much ground for complaint, as evidenced by references which are made to the matter wherever a group of Hardware merchants assemble to discuss trade conditions. The success which has attended the efforts of retail associations in this regard promises well for their further usefulness.

#### THE PARCELS POST BILL.

A matter of vital importance and that received grave consideration was the Parcels Post bill that was introduced in Congress. The provision of the bill is to allow packages up to 200 pounds weight to be carried through the mails at a cost of only a few cents.

The vast and far reaching effects of the proposed bill, if passed, may at first glance not be apparent, but it will require but a few moments' consideration upon the part of any sensible business man, to convince himself that no measure has been devised that would more completely serve the catalogue houses as a weapon of destruction to use against the retail merchants of every calling in



HENRY J. HEICK, Treasurer.

the country, and particularly those of the smaller cities and towns.

The discussion awakened the delegates to the importance of using their utmost endeavor to arouse the fellow merchants of their community to the iniquity of the measure, and to the imperative necessity of doing everything in their power to prevent the bill from becoming a law. It was arranged to have the movement of the bill carefully watched and vigorously opposed both in committee and when it comes before Congress.

As the bill, so far as I have learned, has never been reported, it is believed the opposition has had the desired effect. But the "snake is only scotched;" it will bear watching.

#### NATIONAL RETAIL HARDWARE DEALERS' MUTUAL FIRE ASSOCIATION.

The proposition to form a National retail Hardware dealers' mutual fire insurance association precipitated a warm discussion, which was taken part in by every one of the delegates. Many speeches were made for and against the measure. The Michigan delegates were particularly pronounced against it, and justice compels me to-day that they argued well. In obedience to the expression of this association at its last meeting your representatives championed and voted for the proposition, and the question was carried and referred to the Executive Committee, which was authorized to take the necessary steps to its organization.

#### A SALARIED PRESIDENT.

Your representatives opposed the proposal to pay the president of the National Association a salary of \$1000 per year. I took the position that the association was too weak numerically and financially to pay a salary, and that it offered too great a temptation to some one to aspire to the presidency who would want it solely for the money there was in it, without regard or care for the welfare of the association. I did not think there was a man present who could be guilty of such a thing. I did not think from appearances that there was one there (except myself) who needed the \$1000, but the paying of such a yearly salary might result in the wrong man gaining the position and do great injury to the association. For that reason I was against the proposition at the time.

#### REPRESENTATION ON NATIONAL COMMITTEES.

The convention honored your representatives by placing Mr. Wagner upon the Committee on Constitution and By-Laws, and myself on Nomination of Officers.

I feel that this report would not only be incomplete, but I would be ungrateful did I not mention the banquet given in honor of the delegates by W. H. Bennett of the Reading Hardware Company, D. W. Simpson of Wilcox Mfg. Company, and J. D. Warren of J. D. Warren Mfg. Company. It was a most enjoyable affair, and one that I am sure will linger in the memory of each one present until the "Warp and woop of life has played its part." And it afforded a striking proof of the capability and versatility of the average Hardwareman, that with a total absence of wine and other exhilarating beverages, every one that was called upon for a talk not only cheerfully responded, but also showed himself well equipped and brilliantly qualified to enliven, instruct and amuse. I have no hesitation in advising any Lyceum Bureau manager, whenever he runs short of platform supplies, to draw upon the delegates at a Hardware convention; I am sure the audiences would be delighted and the manager prosperous and happy.

In conclusion let me say this in behalf of our own State Association. Talk for it! Work for it! Stick to it!

#### Question Box.

The Question Box yielded the following inquiries:

1. Is it better to pay your bills by checks than to have a jobber make a draft on you?
2. When will the Kentucky Hardware and Stove dealers start an insurance company of their own in this State?
3. What is your opinion of the importance of emigration to our State?
4. What is the general opinion of the members of this association as to the work and result of same since its organization, and also what do they think of the future?

These questions were the subject of considerable discussion, in which most of the members present participated.

#### Election of Officers.

At the afternoon, the closing session of the convention, the following officers were elected for the ensuing year:

PRESIDENT, W. P. Oldam, Mt. Sterling.  
FIRST VICE-PRESIDENT, U. S. Shacklett, Fulton.  
SECOND VICE-PRESIDENT, Jos. C. Kirchdorfer, Louisville.  
SECRETARY, Paul Wagner.  
TREASURER, Hy. J. Heick.

J. R. Sower of Frankfort and Paul Wagner of Louisville were appointed delegates to the annual meeting of the National Association, at Chicago, March 17-19. J. C. Frederick of Owensboro and A. B. Durham of Danville were selected as alternates.

Louisville was chosen as the scene of the next annual meeting of the association.

#### Entertainment.

The jobbers and manufacturers of Louisville entertained the members and their wives with a theatre party on Tuesday evening.

On Wednesday evening they were hosts at a fine banquet given at the Louisville Hotel, over which W. R. Belknap of W. B. Belknap & Co. presided. Over 100 guests were present. The affair was thoroughly enjoyed by all.

## Nebraska Retail Hardware Dealers' Association.

### CONCLUDING REPORT.

**F**OLLOWING the opening session on Tuesday afternoon, which was reported in our last issue, an executive session was held.

The following committees were appointed by the president:

**PRESS:** Nathan Roberts, Omaha; J. C. Cornell, Ord; A. E. Small, Crete.

**FINANCE:** Mr. Lahr, Lincoln; E. Hoppe, Lincoln; Mr. Peterson, Lincoln.

**RESOLUTIONS:** T. F. Halloway, Fremont; Frank Hacker, Friend; Thos. Nelson, Diller.

**NOMINATIONS:** W. F. Jakway, Lincoln; M. D. Hussie, Omaha; F. C. Mather, Aurora.

#### Secretary's Report.

H. J. Hall, secretary of the association, then submitted the following report:

While this is our third meeting, we are not yet one year old. Our present membership is 182. This can certainly be classed as "A" Grade, and if our kindergarten work is to be a criterion we can look forward to something good for the Nebraska Hardware dealers who are members of this organization.

If time could be spared from other business, many of the letters received would be worth reading. One, however, breathes the spirit of a true business man, and will give the dealers the right idea. It is as follows:

I regret that it is impossible for me to be with you at the meeting of the Nebraska Hardware Dealers next week. My years are with all resolutions, &c., made at the meeting, as I am confident nothing will be done but what will benefit us. Also inclose P. O. M. O. for \$5 to help pay expenses. If in need of more at any time, please let me know by letter, and oblige,

Yours respectfully,  
A. F. EBERLY.

In reply to this letter, it gave me pleasure, as secretary of the association, to tell him of our appreciation of his loyalty, and in returning the excess over regular dues quoted our motto as the watchword of this association: "Equality Before the Law," and that he could depend on all members being treated as equals, which would explain my action in returning his overpayment.

It gives me pleasure also to call attention to the work of our worthy brother, C. A. Peterson of Oakland, who has sent in 14 membership applications since January 1, 1903, with draft for dues, and did quite as well last year.

At the suggestion of the Executive Committee, Frank Stanton was employed as regular solicitor, and has secured 54 members. Many letters have been received asking the association to take action in regard to the Lien law, which the building contractors are working to have annulled during the present session of the Legislature. Also, that action as an association may be taken favorable to an improvement on the present garnishee law. A bill with this object in view has already been introduced in the House of Representatives. The Retail Grocers' Association favoring the bill, and the labor union against same, had a hearing before the committee to whom the bill was referred on Monday of last week, and we will hear from the president of the Grocers' Association during this meeting.

#### PROPOSED MUTUAL INSURANCE COMPANY.

Many letters have been received urging the formation of a Retail Hardware Dealers' Mutual Insurance Company, and we hope favorable action will be taken before adjournment.

#### RAILROAD AGENTS PROHIBITED FROM DISTRIBUTING DEPARTMENT STORE CATALOGUES.

Your secretary desires to report the receipt of favorable replies from all the railroad companies in this State, stating that orders have been issued from headquarters prohibiting any railroad agent from distributing any department store catalogues. Any known violation of this order, if occurring since February 1, should be promptly reported to your secretary.

#### RETAILERS CONFINING PURCHASES TO JOBBERS IN SOME LINES.

The resolution passed at our last meeting instructing me to request the jobbers to refrain from encroaching on our business domain was obeyed by your secretary, and replies from the different jobbers were favorable and all promised to comply with the request. They did more, as became the true Yankee spirit, and suggested that it might be well for the retail dealers (whom the Hardware jobbers are anxious to protect) to confine their purchases of Tinware and Granite Ware to the Hardware jobbers, instead of encouraging the wholesale grocers, who made it their business to stock small racket and grocery stores with Tin and Granite Ware. This is a point worth considering by every merchant.

#### GRIEVANCE COMMITTEE.

Another matter which should come before the convention for action is the appointing of a Grievance Com-



C. A. PETERSON, President.

mittee. Several complaints have come to me, and all have been satisfactorily adjusted, save one; this will be settled satisfactory to the member if he is in attendance at this meeting. It could not be arranged by correspondence and was personal in its nature, being a difference of opinion between a certain jobber and the member above mentioned. My attention has been called to the jobber who does a retail business, and requests have been made to bring this to the attention of the association for action. Other State associations have this matter in hand, and relief is expected. To quote the Illinois sentiment: "If a jobber wants our business and our customers, too, quit him; the sooner the better."

#### MERGERS.

The tendency of the time is toward mergers. Buying for the members of this association by a special committee would place every member in better condition to meet the prices made by catalogue houses and would not necessarily affect the local jobber. This is a matter that should have the attention of this convention. The work mapped out will keep every member interested and can be made profitable.

#### ANNUAL DUES.

Our annual dues are now \$3. Out of this we must pay \$1 per year for each member for the National Bulletin. This will leave very little to do necessary work, which requires the outlay of time and money. It has been suggested that the annual dues be raised to \$5.



## Nebraska Hardware Association.

### THE IOWA STATE CONVENTION.

One word about my visit to the Iowa State convention. The enthusiasm of the members after five years of organized work was an inspiration to every man who attended the meeting. It was a business meeting from start to finish, and every man was ready to respond. They advocated meeting more than once a year, although they did not take any action toward a semiannual meeting. A meeting of this association during August, taking advantage of Epworth League rates, and having ample hotel accommodations, would be a good thing for us. The Iowa Association at their meeting laid the foundation for a Retail Hardware Dealers' Mutual Fire Insurance Company, which will be a permanent organization.

### ENLIST COMPETITORS IN ASSOCIATION WORK.

It is of vital importance that members should enlist their competitors in this association work, and our Lincoln local branch will testify to the benefits resulting from our State branch. It is generally supposed that the small towns are most interested in the Retail Hardware Dealers' Association; but every dealer in this city is now an active member. In our neighboring State—Missouri—'tis said, "the dealers must be shown" the good results from organization. Nebraska dealers are looking the matter up and sending in their applications and fees, because they are progressive.

In conclusion, it gives me pleasure to state that the assistance of our worthy president, C. W. Morton, the energetic support of the chairman of the Executive Committee, W. E. Jakway, and the co-operation of the entire membership of this association have made my duties much more pleasant and have added to the life of the organization. Believing that this year will see an increase of 100 per cent. over present membership, I leave it to each member to do his part.

On motion the secretary's report was approved.

It was moved and seconded that the convention extend a vote of thanks to the members, who have been so active and successful in obtaining new members. The motion was carried.

On motion the chair appointed a committee of five to call on the Legislature and endeavor to have the two bills now before the Legislature to which the association are opposed defeated. The committee comprised Thos. Nelson, Diller; Fred. Hoebler, Diller; F. D. Kees, Beatrice; M. A. Haight, Crete; C. H. Rudge, Lincoln.

The convention adjourned until 9 o'clock on Wednesday.

### WEDNESDAY MORNING SESSION.

The convention was called to order at 9.30 by President Morton, who announced that an executive session would be held.

After the minutes of the previous meeting had been read by the secretary, and roll call, several letters were read from members explaining their unavoidable absence.

M. L. Corey, secretary of the National Association, then addressed the association. Mr. Corey's remarks were listened to with close attention and his presence was evidently much appreciated by the members.

The convention then adjourned until afternoon.

### WEDNESDAY AFTERNOON SESSION

At the afternoon session a motion made by Mr. Roberts of Omaha that traveling men be admitted as honorary members of the association upon the payment of a fee of \$1 was defeated.

### Increasing Membership.

The president then called on C. A. Petersen of Oakland, who spoke as follows on the subject of "Increasing Membership."

I was much surprised when I received a programme and looked over the same to find my name down for an address. No one here would more likely be able to address you on the subject assigned me, for it is some-

thing I have taken pride in since we met in Hastings and organized last summer. But my early days were spent on the Cuming County prairie herding cattle, until I was old enough to take charge of heavier farm labor, instead of in the so-called "little red school house," where I should have been.

The subject, "Increased Membership," is one on which I may be able to say something, if you will only bear with me in my own way of presenting it.

To accomplish anything of what we in the future must try to carry out, it is necessary to have an army of membership that are in sympathy with the problems confronting us, and that will contain a majority of all the Hardware dealers in each State.

### HOW TO STRENGTHEN THE ORGANIZATION.

We have a National organization South with which we have affiliated, but what are the officers of that organization able to accomplish, if we as a State organization are not awake to the situation, and assist them by constantly enlarging and thereby strengthening our State organizations? It is a duty we owe to our own welfare that each of us here upon hearing that our neighboring Hardwaremen do not belong to the association, should see if it is not possible to get them to



C. W. MORTON, Ex-President.

join the organization, therefore, take the train to the neighboring town where there is always a Hardwareman as sure as there is a town. Some towns have three or four Hardwaremen. Get all of them to join. We want their support, but we cannot have their hearty support unless they become one of us, therefore, convince them that they must join. Convince them that it is for their own benefit that you request them to become members. Surely the small membership fee should not hinder them from coming in. It is a fact that although the Hardwaremen have received a great deal of benefit through the National organization having succeeded in having some factories restrict prices issued by catalogue houses, nevertheless, it requires argument to convince some Hardwaremen of this fact. I must acknowledge that in many cases the margins on these articles are too small, but if we keep increasing in membership all over this broad land, we will soon succeed in having the factories keep a great many staple articles out of the hands of disreputable catalogue houses, and thereby profit by having the exclusive sale of these goods.

### VALUE OF PERSONAL WORK.

We push nearly every article in the Hardware line, and are therefore entitled to consideration. For instance, if ———— should be requested not to place their ——— in the hands of catalogue houses at prices detrimental to the Hardware trade; if we were strong enough to demand our rights, they would surely submit to our request. Let us not give up, be-

cause we do not think there is enough accomplished. If we do our duty, we, through the National organization, can propose what is right and just and demand it, instead of as now, beg to endeavor to accomplish what are justly our rights. Let us fight the battle with courage and not turn our backs to the faithful members and refuse to help the cause along, just because we don't seem to get what we want all at once. It seems to me that Hardwaremen ought to become members of the organization without personal work; but it is nevertheless true, out of all the Hardwaremen for 75 miles in most of the towns along the C. St. P., M. & O. Railway, in one of the best districts in Nebraska, I made an effort to secure the membership of the 23 Hardwaremen, who had had several invitations by letter from our State secretary. I called upon them personally, and found them all willing to join the organization except one. This convinces me that it is necessary to do personal work, if the increase in our membership is to meet our desires.

#### BENEFITS OF ORGANIZATION.

I read in the Omaha *Bee* an account of the last meeting of the Omaha Retail Liquor Dealers' Association. They raised the membership fee from \$1 to \$5, and the monthly dues from 25 to 50 cents, and they also voted to secure a larger hall for the next meeting. Then I wondered what was their object in organizing. I found by reading further that they passed a resolution opposing Senate bill No. 107. This was a bill they considered detrimental to their interests. This made me think of the much talked of Parcels Post bill. This bill, if passed, will make it possible for the United States mail to carry for a few cents, to the very door of the consumer, nearly every article which we carry, on which our margins are comparatively good. Suppose we were thoroughly organized in each State and we passed resolutions to oppose such bills, which would, if passed, sound our death knell: would not our representatives pay more attention, or, in fact, could we not defeat such a bill by passing resolutions opposing same and present such resolutions to our Representatives in Congress? There are a few difficulties confronting the retail Hardwaremen other than catalogue houses and the Parcels Post bill that we can straighten out to our satisfaction when our membership is increased in this State to what it ought to be. It is a universal law that nothing remains in a stated position; we, therefore, must advance or retreat, and an advance can only be made by increased membership. Therefore, let every person here consider himself a committee of one to enlarge our membership and proportionally increase our strength.

M. A. Harglerad of Holstein introduced the following motion:

In order to complete this organization I move you that we appoint a committee of eight members to visit the different Hardware dealers in the territory hereafter named, and encourage them to join this organization:

Committeeman No. 1 to cover the following counties: Dawes, Sioux, Box Butte, Scotts Bluff, Nanner, Kimball, Cheyenne, Deuel, Sheridan; No. 2: Cherry, Keyapaha, Brown, Blaine, Thomas, Hooker, Custer counties; No. 3: Keith, Lincoln, Dawson, Perkins, Chase, Hayes, Frontier, Gosper, Furnas, Red Willow, Hitchcock, Dundy counties; No. 4, Harland, Franklin, Webster, Nuckolls, Clay, Adams, Kearney, Phelps, Buffalo, Hall, Hamilton counties; No. 5: Sherman, Howard, Merrick, Nance, Greeley, Valley, Loup, Garfield, Wheeler, Holt, Rock, Boyd counties; No. 6: Madison, Stanton, Cumming, Burt, Washington, Dodge, Colfax, Piatte counties; No. 7: Polk, Butler, Saunders, Douglas, Sarfy, Cass, Lancaster, Seward, York, Otoe counties; No. 8: Nemaha, Johnson, Gauge, Jefferson, Thayer, Pawnee, Richardson counties.

Also that each committeeman so appointed be allowed \$3 a day and expenses out of any funds belonging to this organization.

After a general discussion Mr. Roberts moved that the matter be referred to the Executive Committee for future consideration and report. Motion as amended was carried. The president then called on M. D. Hussie of Omaha, who read the paper on "Mutual Fire Insurance," which was published in our last issue.

#### Indiscriminate Selling.

Nathan Roberts of Omaha then delivered an address on "Indiscriminate Selling," as follows:

In offering a paper on "Indiscriminate Selling," I would say, circumstances have unfitted me for assuming such a responsibility at this time. We are moving to a new location, and for the past two weeks have put in from 12 to 15 hours daily with hard mental and physical labor, and were it not for the loyalty and fealty I hold to our association of Hardwaremen I should not, under any condition, have sacrificed our present pressing interests.

The subject assigned by our secretary, "Indiscriminate Selling," is so akin to one other on the programme—i. e., "Illegitimate Competition"—that it seems to be a distinction without a difference, and might be handled as one subject without apparent injury or benefit to either.

However, I assume that our secretary had specially in mind, when he assigned to me this subject, a certain position I tried to maintain at our last meeting, on the policy adopted by at least some of the jobbers of the State and the aspect it presents to the retailers of Hardware. I would like to say, at this time, that I have not seen, nor do I think, that any notice has been taken by at least the jobbers of Omaha of the resolution passed at that meeting. The subject I am about to discuss



NATHAN ROBERTS, First Vice-President.

briefly is one which needs our closest attention, and is more vital than we at a glance conceive or imagine.

#### JOBBERS WHO SELL CONSUMERS.

I understand the meaning of the term "Jobber" to be the middleman between the manufacturer and the distributor and while I do not wish for a minute to be understood as decrying his position in the commercial world, as I firmly believe the jobber is essential to both manufacturer and retailer, still I will say fearlessly that he who solicits your trade and sells you his wares and at the same time caters to and sells the consumer, still claiming to do a strictly jobbing business, has not as much principle as the man who gets your money by gambling or other nefarious methods of the crook's profession and has neither his own nor your best interests at heart, the ruling passion to get the almighty dollar being his only excuse. If the Good Book is correct when it states that the love of money is the root of all evil, I think I might prophesy in this age of A. C. P., which interpreted means Association, Combination and Protection, that the so-called jobber who pursues this course may even now see the handwriting on the wall. "Thy glory is departed from thee," for the man who is his own best friend soon has few others. To illustrate the injury this practice is doing to the retailer of Hardware in the State of Nebraska let us consider a few figures. I am credibly informed that there are six jobbers of Hardware in the State who claim to do a strictly jobbing business. There are about two hundred jobbers of other lines, who employ at a fair estimate 3000 employees. Of this number it is reasonable to as-



## Nebraska Hardware Association

sume that each has at least 20 good friends who from time to time are willing to use him as such. From these figures we find that there are 60,000 or upward who can and do draw their needs through their 3000 friends employed by jobbers outside of Hardware jobbers. This part of the transaction, Hardware jobbers inform us, they cannot obviate or eliminate, as they consider themselves under obligations to their brother jobbers to furnish their wants in the regular channel. Again, there are upward of 200 machine shops and factories which draw more or less of their supplies from the Hardware jobber. Again, we have corporations of various kinds which insist that they also must draw their supplies from the Hardware jobber, I might include contractors and individuals, and these are not all. It is a well-known fact and I have data in my possession, as has our secretary, to prove that ranchmen and farmers all over the State are sold their needs indiscriminately. If time would permit I could pile up figures of trade diverted which legitimately belongs to the retail Hardware dealer which would appall the most skeptical in this body.

### TRADE DRIFTING INTO OTHER CHANNELS.

In these busy and hustling times, when we all have as much trade as we can comfortably care for, we do not perhaps take heed of or notice that we are losing day by day in this nefarious practice, and while I am not a pessimist, I will warrant the assertion that at a not distant day a good many of us may be sitting around upon Nail kegs whittling sticks and wondering why we are not having more trade. But some one will say: "How can this be remedied?" "Persistency makes a probability of a possibility." It is a well-known fact that the retail grocers of Nebraska were laboring under the same difficulty that we are to-day, but through the agency and effect of the Retail Grocers' Association they stand to-day on solid ground, and no jobbing grocer dare sell any goods at retail, not even to an employe of the house. What is possible for them to have accomplished is possible for us. It is for us to take a firm stand upon our rights, and if necessary assert them.

If we will stop to consider the position the jobber holds to-day between the manufacturer and the retailer it would seem to be an easy problem to solve. The manufacturer can get along without the jobber, although he is an essential adjunct; but the manufacturer can reach the consumer of his goods only through the rustling, up to date, progressive retail Hardware dealer, whether or not he knows and appreciates the fact. A combined effort upon the part of all the retailers of the United States would soon bring the manufacturer to a sense of the position. It would simply mean that through our national secretary the manufacturers instruct the jobbers of the proper meaning or prerogative of their business; and I warrant the assertion that if the manufacturers should instruct the jobbers of the United States to limit their sales strictly to the source which legitimately markets their goods our troubles in this direction would cease.

### MANUFACTURERS SELLING DIRECT TO USERS.

The same evils exist to a marked degree through the manufacturers marketing their products direct to the user or consumer. I have in mind a case which occurred a few days ago, where a manufacturer in person solicited our orders on an article of merit, and one which promised quick sales and good returns, when I discovered by close questioning that he had sold largely to the jobbers, also to some retailers (by the way, at an advanced price over that to the jobber), as well as to several machine shops. Now in my opinion, be the article ever so meritorious, it is our duty to turn him down coldly, which I did.

### ANOTHER PHASE OF ILLEGITIMATE COMPETITION.

Another phase of illegitimate competition we are up against is the selling of staple and standard articles by prominent manufacturers to catalogue and department houses, and the jobbers themselves might be included in this list. It seems a gigantic task to attempt to divert these standard lines into their proper channels—

namely, the legitimate jobber and the legitimate retailer; but when we consider the strength and magnitude of our National Retail Hardware Association, piloted by our able secretary, M. L. Corey, it seems to me that the immense mountain is but a mole hill after all. Does it not look reasonable that should we request through our National Association that such concerns as the — and many other manufacturers of prominent lines, should desist from selling their products except through a recognized channel of industry the handwriting on the wall would be plain to them as to our jobbers who practice indiscriminate selling? After all, the consumer uses their product, and it makes no difference to them whether it reaches him through legitimate or illegitimate channels, and they would be foolish not to see which side their bread was buttered on.

### IN CONCLUSION.

In closing this brief and rambling paper, I think it well to insist on a closer, friendly business relationship. Our interests are identical. We are not in the business for our health. We ask nothing but justice and right. The many "hat on your head" stores of the Eastern cities and the greedy grasping of money by the jobbers from trade that does not belong to them are features in our daily business which need our earnest thought and united effort to overcome. You have not and I have not left our business to come to this hospitable city of Lincoln for a holiday, but rather that we might by thought and act attain that for which we are laboring and which legitimately belongs to us.

When you leave Lincoln for your respective homes do not become wrapped up in your own little interests, but consider us all as working for one end—namely, prosperity and happiness—and if we hold this motto in view, another year will not have rolled around until we will have accomplished what we desire. In this work there are great possibilities, and I hope no member will become discouraged, but push forward, seeing the result that honest, earnest effort always obtains, and in the words of our national president, "Rally round the standard of the honest, fair and free, and teach to those who would oppose their equals we will be."

### Benefits of Organization.

The president then introduced J. W. Armstrong of Auburn, who spoke as follows on "Benefits of Organization:"

The benefits to be derived from an association are great. We all know that there is a great deal to be derived from this association work. I think that this association should be congratulated.

Trusts have been considered by some of our customers and particularly the farming interests as being closely identified with association. This is absolutely untrue. I am opposed to associations that meet for the purpose of getting together and fixing prices on any of our wares that we may have for sale, but I do believe that an association can do a work that no other plan will bring about. In other words getting together once or twice a year we rub up against one another, we meet our competitors, whereby if we stayed at home with our business we would seldom come in contact with them except in a business way, or in the way of competition, whereby there is a feeling created that cannot be overcome in any other way except in this association. We find that the trust question is also very old. We find, going back to the time of the creation, that the trust question originated in the garden of Eden. It started when the first man devoured the apple. Now I hope that this association will be careful in its deliberations. I hope that we will not do anything that will reflect on us. I hope that our plans will be those of social and educational benefit. There is a great work before us, and I was very much in sympathy with the gentleman's motion to enlarge this association and spread it over the State of Nebraska.

While I disagree with him in the way to do it, yet I believe that this executive committee will find some way out of it, and that we will have some representative traveling man going over this State and in place of 190 members we will have a membership of 500.

The next hour was devoted to open discussion by the members on the subject of fire insurance, legislation and other private association matters.

The finance committee, Mr. Lahr, chairman, reported that they had examined the reports of the secretary and treasurer and found them correct.

#### Resolutions.

The Committee on Resolutions presented the following:

*Resolved*, That this association tender a vote of thanks to M. L. Corey, secretary of the National Association, for his able assistance and encouraging spirit in our behalf.

*Resolved*, That this association tender a vote of thanks to the following parties, who have helped in many ways to render our meeting at this time pleasant and profitable: The Lindell Hotel, the Lincoln Hardware Company and the traveling salesmen representing the following firms: Great Western Stove Mfg. Company, Thomas White Stove Company, Acorn Stove Company, Peninsular Stove Company, Gem City Stove Company, Michigan Stove Company, E. C. Atkins & Co., Bridge & Beach Mfg. Company, Rock Island Stove Company, Fuller & Warren Company; also to the Lincoln Hardware Dealers and many others.

*Resolved*, That this association tender a vote of thanks to the Lincoln press for reports, and would recommend Lincoln Trade Review as being worthy of their support. Also Lieutenant-Governor McGilton, W. S. Wright of Wright-Willhelmy Company, E. P. Berryman of Lee-Glass-Andreesen Hardware Company for the kindly interest and addresses delivered before the association, the trade press and also to the Executive Committee and other officers of our association, especially to our worthy and efficient secretary, through whose efforts we have attained our present proportions.

The resolutions, as reported, were adopted.

#### Mutual Insurance.

The following was the report on the subject of mutual insurance:

We have to report favorably on the formation of a mutual company by the retail dealers in Hardware in Nebraska, provided some plan can be adopted satisfactorily eliminating the objectionable features of many mutual insurance companies, and we further recommend that our secretary be empowered to engage proper legal advice in the drafting of such a plan, to be submitted at our next annual meeting.

It was moved by Mr. Rudge that the report be adopted.

#### Legislative Committee.

The report of the Legislative Committee was as follows.

We visited the legislature this morning and we got some information. The Committee on Miscellaneous Business, to which this Lien law was referred, agreed to meet us at 1.30 this afternoon. Most of our committee were there, but, unfortunately, only a minority of theirs. However, as far as the committee went, they satisfied us pretty well that they did not want the present Lien law repealed, although they gave us to understand that a strong effort was being made by a number of people in this town to have the law repealed to their benefit. Yet they are not extremely anxious to do so, and they also told us that they have promised the laboring people, or the labor union, or contractors, who are united, to give them a hearing before that committee, and recommended to us that we have one or more persons from this association appointed on a committee, so that in case of necessity they could call them in and confer with them. They practically gave us assurance that the law would remain as it is, and not be taken from the committee in whose hands it now is.

The bill in regard to the Garnishee law, which has been a secondary part of our duties, we find it hard to trace. We have not been able to get a copy of the bill, but we have been promised a copy, and I have just succeeded in seeing the chairman of that committee and had a talk with him about it. He says that he thinks, so far as he is able to judge from the sentiment in the House, that probably \$30 or \$35, as the bill now stands, will be the amount of monthly salary that would be allowed before the Garnishee law would take effect.

However, there is a sentiment in that committee to amend that bill and make it that three-quarters of a man's wages, no matter what they are, will be exempt from garnishment, one-quarter subject to his debts, and as such I believe that this association should recommend that feature of the proposed amendment, and as your chairman I would make that motion.

I will now submit the following resolution:

*Whereas*, Our exemption laws as at present upon the statute books are unjust, harmful and detrimental to the Hardware dealers, and society at large, aiding and abetting dishonest people to ignore and avoid their debts, thereby forcing merchants into bankruptcy and causing hardship to the public by an increase of cost in their supplies; and

*Whereas*, Such laws tend to belittle financial obligations and to foster dishonesty and greatly increase an undesirable class of people; and

*Whereas*, We know that such unjust exemption laws are a menace to society and good morals, and an aid to the dishonest people and ruinous to the mercantile interest of the State. Therefore, be it

*Resolved*, That we, the Hardware dealers of the State of Nebraska, in convention assembled, petition our honorable members of the Legislature to modify, repeal or



MAURICE D. HUSSEY, Executive Committee.

amend our exemption laws so as to properly protect the interests of the retail Hardware dealers, so that there may be some opportunity to collect accounts from persons who are fully able, but who will not, without legal compulsion, pay their just debts; and be it further

*Resolved*, That the secretary of this association send a copy of these resolutions to the Senate and House of Representatives, and to each member thereof, asking for their support to the measures now pending in the Legislature.

The resolution was adopted.

By MR. RUDGE of Lincoln: I move you that the secretary be instructed to have Mr. Nelson appear before that committee. Motion adopted.

#### Omaha Selected.

Mr. Roberts of Omaha invited the association to hold their next annual meeting in that city, which was unanimously agreed to.

#### Officers for 1903.

The Committee on Nominations reported as follows:

PRESIDENT, C. A. Peterson, Oakland.  
FIRST VICE-PRESIDENT, Nathan Roberts, Omaha.  
SECOND VICE-PRESIDENT, Alex. F. Meyer, Hastings.  
THIRD VICE-PRESIDENT, Frank Hacker, Friend.  
SECRETARY-TREASURER, H. J. Hall, Lincoln.

These gentlemen were unanimously elected.

#### Acknowledgments.

Secretary Hall addressed the convention as follows: "I thank you most heartily for the honors that you have conferred upon me in again selecting me to the office of secretary. I have already said to the members of this convention that I would not accept the nomination for this office again, but the Nominating Committee have



## Nebraska Hardware Association.

urged this matter so strongly upon me, and in view of the fact that every member here seems to be interested and has felt this meeting to be a profitable one—we have certainly accomplished something in a social way, and I hope we have in a business way—I will accept the trust under one condition. It is a hard one for you, but no harder than for me, and that is that every member, I do not care where he lives, shall get at least one new member for our association during the next 60 days. If he cannot in 60 days he cannot in six months."

The president appointed Mr. Roberts and Mr. Keith to escort the new president to the chair. Mr. Peterson said:

My election was such a surprise to me that it took my breath away when I heard that I was to be the lucky one. It is the duty of the president to serve this body, not to boss it altogether, and I assure you that from this moment on my heart and my labor and my thoughts, outside of what is necessary to take care of the business at home and family, will be with this fraternity. Because I am made president I am not going to be too big to go out and solicit members. I am going to Knox County, and I know of several other gentlemen that would make good members if we could only get them here. I wish you would all do as our secretary has asked you to do, that is, for each member to secure another member; 206 times two would make 412 members, and we can do better than that if we try. Gentlemen, I thank you.

By F. D. KEES of Beatrice: Mr. President, I move that we extend a vote of thanks to our retiring president. He certainly has worked well during this meeting, and for his faithful work it is no more than right that we thank him. I would also incorporate in that motion that we extend a vote of thanks to all the retiring officers, whom I think have tried to do their duty and have worked hard. This includes, as well, the one who is not retiring. The motion was unanimously adopted.

The president then appointed as delegates to the national convention, to be held on March 17, 18 and 19, Mr. Roberts of Omaha and H. J. Hall of Lincoln.

### Mr. Corey's Address.

Mr. Corey addressed the convention as follows:

I haven't very much more to say, but I want to congratulate this association on the progress they have made; I feel in it my heart. I have attended a great many State conventions, and I want to state to you, gentlemen, that while some of you have expressed a sentiment of discouragement, you have surpassed any other State association. Take the percentage of members that organized this association last year and compare it with the present roll of over 200. That shows that somebody has done some good work. There is one fact that I want to call your attention to, and that is that you will probably lose some of the members, and they are the very persons that are not here. You that attend the convention see the benefits, the necessity, and you go out and stand by your association. In five years of our organization we have only lost five members that have been attending the meetings regularly, and they had sold out or something of that kind. I was talking with a gentleman yesterday and he said he did not know whether he would join the association, as he could not see where it would benefit him particularly. You will strike that kind of people all along the line. Two years ago I visited a man and he turned me down cold. He had no use for the association work. I talked with him quite a while; did not get mad about it. This year he came in and applied for admission.

I believe you are going to succeed in carrying your part in the lien law. That is something to go after new members with. Do not be bashful about it. Whenever that bill is left in the present shape go to a nonaffiliated dealer and say "If there wasn't an organization of the Hardware dealers of Nebraska you would have your lien law changed." That shows the necessity of coming together for the future.

Mr. Rudge of Lincoln moved that the secretary be authorized to have printed a circular letter explaining the position of the association in relation to the two bills now in the Legislature, and that these circular letters be sent to each member of the association, who will solicit names to be signed in the space provided for that purpose, and that each member send it to his Representative or Senator. And that these letters be sent to all dealers as well who are not members.

The motion was adopted.

### Executive Committee.

The president appointed the following Executive Committee: M. D. Hussey of Omaha, W. E. Jakway of Lincoln, M. A. Harglerode of Holstein.

After some further discussion the convention adjourned *sine die*.

### Address of E. P. Berryman.

I was urged to visit this convention, and I am glad I did, but my work goes undone until I get back. I can figure out to myself now why Mr. Morton wants to



E. P. BERRYMAN.

call me down here. He wants to be represented by two extremes from Omaha, Lieutenant-Governor McGilton, 6 feet 4, and myself, 5 feet 2. Now, as for the merits of this association, I can speak freely on behalf of the jobber: that he is anxious and glad to see this organization go on. I know that is the feeling among you, and as Mr. Wright said, they are anxious to have their men lend their help to the association. It will be a great future all around. Manufacturers, for instance, have organized and the jobbers go hand in hand, and it is right that the retailer should come along with his share of the fun.

### AN INVITATION TO OMAHA.

As I started from home this morning I told my little daughter I was going to Lincoln. In some way she has always had the penitentiary connected with the city of Lincoln, and she said, "Are you going to the penitentiary?" I told her it was not so bad as that. I said, "I am going to attend a great convention of the leading Hardwaremen of Nebraska, and I think I will go down and lobby to have this convention held at Omaha the next time." "Why, papa, lobbying is worse than going to the penitentiary." She has heard her grandfather expatiating on the dire results accomplished by the lobby. But after looking over the ground I do not believe that I have to do any lobbying. I think that our good friends are perfectly willing that this convention should go to Omaha next time, but we can't offer you any more than Lincoln has. I never before saw a merchant leave custom-

ers standing in rows to talk to us fellows, but when I ask you to come to Omaha I mean that we are going to give you all that you could ask.

#### CONCERNING RETURNING GOODS.

Now as to addressing the convention on any particular line, I had not thought I would be called on for this part of the programme, and I would feel somewhat like the party who was showing a friend through a canning factory. He asked him what was being put in the cans. He told him "Peaches." "Your best brand?" "Don't know yet, we haven't labeled them." My speech has not been labeled; you can put that on afterward. But the thought has often come to my mind, principally by correspondence, that most of the dealers in the State and the Hardware jobbers are digging away at the subject of returning goods to the jobber. Should they do it? I say yes, it is perfectly legitimate, and I invite them to do it when it is our fault, and we are perfectly willing to consult with them if it is their fault. I do not want to criticize the way you have been doing it, but let me suggest a way. For instance, you order a case of a certain brand of goods, which, of course, we are out of that day and we send you another brand. The result is, it is going to come back. The goods are delivered at the depot by the drayman, and he sends them back in his own name and they are shipped possibly to a transfer point, where it is discovered that the car is needed South. The goods are transferred and shipped to Omaha on another bill of lading. We do not have him on our books at that transfer point and the result is the bill goes in returned from that particular transfer point. The next thing we receive is a letter from the dealer who returned the goods, asking why he has not got credit on the statement which the bookkeeper sends out every month. After two months we finally discover that these goods belong to him and credit them up. These things happen every day. I would suggest that the dealer send us a bill of lading with an invoice and the date of the invoice they were charged to him and the prices, and I am sure that the credit will appear on our next statement.

#### SELLING TO CONSUMERS.

Another thing on which the trade papers are pegging away at the jobbers pretty hard is about the jobbers selling to consumers. We do it, we acknowledge it, but it is not intentional on our part. For instance, we will have Mr. Jones come into Omaha with a couple of cars of fat cattle on hand. He naturally feels inclined to send something nice home to his wife. He comes in to us and says he is in business out there. We cannot always investigate, though we are anxious to do so, but as some live in outlying districts they would have a right to buy on that proposition, or he might go to Mr. Morton or some other dealer and have it charged to him; and we would send it out. In three days we have a letter from three dealers saying that we are shipping goods to their trade. This is pretty hard, and we begin to look around to see where we have sold to the consumer. We finally have to write to the dealers to get this information, and then we find that Mr. Morton has ordered a Machine. That happens time and again during a month's business. When we send anything to the consumer it is not intentional. The jobber is not trying to antagonize his trade in any such way, but give us the benefit of a doubt and write us telling us what is the matter; if we cannot explain it to you in any other way we will send you a credit memorandum for \$2 for our getting caught in the deal. I join Mr. Wright in behalf of our firm in extending a cordial invitation to you to visit Omaha the next time you meet. We are going to do everything we can, as well as Lincoln.

#### A STORY WITH A POINT.

Not long ago a customer came in, a nice old gentleman, with his want book in his hand, with his pencil out. I supposed he wanted to take the 8.40 train. We sat down to the desk and wrote up a few items. His appearance indicated to me that at home he might be a preacher. When the question was asked if I smoked, I wondered whether he really wanted a smoke or wanted to find out if I smoked; but unfortunately I did not have anything, and I thought perhaps it was well I didn't.

He did not seem anxious; and after we had written up a few more items he said, "Do you swear?" I had been interrupted several times, and imagined that he thought I ought to do some swearing; but I told him, "No; not unless the door pinches my fingers and takes off a finger nail, then I might ejaculate." He seemed satisfied. Finally he said, "Do you ever take anything?" That was quite personal. He said, "That is just what I wanted to find out. Let us go out and have something." You good people come along and ask for what you want. It is a pertinent question, but if you do not see what you want ask for it. Mr. Wright has already demonstrated, in his little talk here, that he knows all about the jack pot, and if you want to see it he will show you that also. He is a good Congregationalist on Sunday mornings and Methodist in the evening. Gentlemen, I thank you.

#### Address of W. S. Wright.

When my friend, Mr. Morton, asked me if I would come down and invite you gentlemen to come to Omaha I thought that was simply a matter of a formal invitation, and I did not have any idea that I would be called upon to make an address. I do not expect to do so now, because I think the Hardwaremen are pretty good workers and not very good talkers. We work a good deal and talk but very little, and in that way reach the highest degree of success. I wanted to express my pleasure, however, in having an opportunity to address such progressive, enterprising business men of Nebraska. I take it this association and the members here are made up of the representative elements—the best business element of the State. There are some who are not here at the present time—many because they are unable to be present, others waiting to see what you will do, and whether it is worth while to chip their \$3 into the pot and come into the game. I hope before you get done your deliberations and actions may be such as to make them feel that they will be benefited by joining, and that you will have at least 600 of the 800 that Mr. Morton said represented the State. There is one proposition that we all appreciate and that is the fact that business conditions are constantly changing, and the men who have the faculty of adapting themselves to the changing conditions and arranging sales to suit the customers' wants are the ones who make the best business men and get a better price than the fellow who jogs along at the end.

#### A MAN WITH A LOW COST SHEET.

A good many years ago I sold a man a small bill of Hardware. He had never had any experience. The next time I called on him I asked him how he liked the Hardware business. He said: "By George, the Hardware business is the finest business I ever struck. Carriage Bolts cost me nothing and I sell them for 5 cents apiece." The time has gone by when you could do that, and when you buy Carriage Bolts at the present discount and sell them for 15 cents you make very little.

The combinations of capital have reduced the profit in many lines of goods to the jobber and to the retailer and the only thing to do is to adjust themselves so as to secure the largest possible margin of profit on the business. Now we all appreciate the objectionable effect of the combination of catalogue houses and department stores. You all suffer from it.

#### A PREDICTION.

Gentlemen, from 1893 to 1897, you remember what those conditions were. I said to a gentleman during that time, and I did not have any idea that it was the truth, but that it would perhaps help him out of his despondency: "The time will come when these hard times will be a matter of benefit, but it will take years to determine, and you will make more money in a series of years than if you hadn't seen just such years as we have had in the year or two past."

#### COMPETITION OF CATALOGUE HOUSES AND DEPARTMENT STORES.

The competition of catalogue houses and department stores makes better business men of us. Such competition has come to stay, and if we are able to meet it, if we are able to give our customers as good service as



## Nebraska Hardware Association.

they can get from the larger houses, we will remain in business; if we do not, you gentlemen will have to seek some other job and will have to look for some other place to do your work. Your going out means the necessity of our following suit, for in your success is our success; we are linked together along those lines, inseparable, and our mutual object should be to work together along those lines that will best promote our mutual interests, because one cannot be successful without the other, and we are deeply interested in the largest possible success of every retail dealer in the State of Nebraska. And yet, gentlemen, no man can accumulate honest wealth without he benefits himself and enriches the community in which he resides.

### LEGITIMATE EXPENSE OF DOING BUSINESS.

In a general way, I think a great difficulty comes from the fact that business men do not understand the legitimate expense of doing business. In a general way I calculate that a retail dealer figures on a gross profit of 30 per cent. That should be his gross profit. Twenty per cent. of that may be figured as a matter of expense. He should, course, figure in his living expense, and all incidental expenses of running the business. When he has 10 per cent. on his sales he has no more than he is justly entitled to. A man who sells \$25,000 a year and makes \$2500 has not secured any more returns on his capital or labor to secure those results than he is entitled to, and yet I think perhaps if you were to analyze your business you would find that a very large portion of it is less than that. You sell Nails and all the staple goods at a very small profit.

### HOW SOME ESTIMATES ARE MADE.

If a man comes in and wants to figure on a bill of Hardware you sit down and figure the stuff at cost and then add 10 per cent., and some will even forget to add the 10 per cent. I do not mean that any one here would forget to add the 10 per cent., but some of the gentlemen at home will forget it. Then perhaps you will incidentally leave out some item in the bill. Only a few days ago, when I started to figure on a little bill of printing, I sent out to three places for an estimate on it. One price was \$14.75, another was \$11.50; if somebody had come along with a price of \$11.25 I would have been satisfied to pay the price and thought I had got the value of my money. But somebody had made a mistake and a \$6 man got the job. The same in the Hardware business. One man's bid is \$64, another is \$62.50. One is \$60. He feels much better to pay the \$60 than to have somebody make him a price on it of \$40, and if he goes to more places and gets a price of \$20 he gets the idea that it is all profit, and you suffer in consequence.

### DEVELOPING NEW CLASSES OF BUSINESS.

In regard to developing the business on new classes of goods a great many dealers say that they do not have any call for them, and when they do not have any call for them they cannot sell them. I have seen communities where they did not have a doctor. They have little sickness, and when the doctor goes to live there see how quick everybody gets sick and how that doctor keeps busy. If you want an illustration of profitable goods, they tell me, though I am not in the drug business, that patent medicines pay the largest percentage of anything manufactured. They say: "Advertise the symptoms they create disease." It seems to me that this remedy is to a large extent in your own hands. I heard two or three years ago from a manufacturer, and a very prominent manufacturer at that time, that one of the greatest difficulties he had to contend with was some rival manufacturer, who either destroyed his profits or prevented him from making an adequate profit, and put him to unnecessary expense. Now I believe that the gentleman across the street from some one of you gentlemen, who is doing business for the purpose of "showing you" that he has a right to do business just the same as you have, is an injury to your profits and an injury to your business, and detrimental to you from a general standpoint, as well as to the jobber and the manufacturer.

### NOT NECESSARY ALWAYS TO MEET SOME COMPETITION.

It is not necessary at all times to meet the competition of the department stores. M. Rogers & Son Company of Omaha have been in business for a great many years; and there is Morton & Son, their business is increasing right along and doing well constantly, and still they are in close competition with the department stores. Department stores do not sell the same class of goods. The department stores sell a class of goods not bought by the people who want the best. They do not get it there; if they want to trim a fine house and they want the best there is they do not go to the department store, but to the legitimate Hardware dealer. They expect and are willing to pay him a profit, and it is not absolutely necessary in all cases that you meet the competition that you have on the cheapest class of goods. I remember quite a number of years ago in selling a bill of goods I asked the buyer if he had ever had any experience in the Hardware business. He said No, I don't know anything about it. I never had any business experience. But I do know if I buy anything for 50 cents and sell it for \$1.75 that I won't lose anything. I told him that he was all right, that he would do for the Hardware business. Ten or 15 years ago that man retired with a competence of \$30,000 or \$35,000. I simply recommend that to you. Make a little more money in a general way. I would like to see every man make, two to one, more money this coming year than last. Any way that I could help you to do it I would be glad to help you along that line. Conditions are such that we should pull together along some line.

### A STORY TO ILLUSTRATE A PRINCIPLE.

When I was up in the house the other day I noticed a boy opening a box; I said to him, George is that the way you take covers off boxes right along? I told him what I would do. I said, you knock the cover off that box, and some man comes along and wants to use that box. It will take him 10 or 15 minutes to get that straightened out, but if you would get a nail puller and take the nails out, you have taken up a little more of your time, but you have saved a lot more of the other fellow's that comes along behind you. Our economical proposition must be this. We must demonstrate our ability to place our goods in the hands of the consumer economically. Under the natural course of trade; first from the manufacturer to the jobber, from the jobber to the retail dealer, and from the dealer to the consumer. If we can by mutual effort demonstrate our ability to distribute along these lines as economically and to the same advantage that others do, we shall continue to make money and prosper; if we cannot demonstrate that proposition, we have got to take a back seat, and make room for somebody else who has a better idea than we have.

### SOME METHODS TO BE IMPROVED.

In doing that there are several propositions where our distribution is a little expensive, and where we are at fault in an economical proposition of distribution. I have in mind the facts of a case right now. Some time ago a friend of ours, who used to be in the trade, wanted a keg of Nails shipped to a firm a little way out. We sold it to him. He did not have the money with him to pay for it. The bill amounted to \$2.50. Nails cost \$2.40, delivered f.o.b. Omaha. It was a small proposition. Two or three months elapsed and we heard nothing from him. Finally I wrote him a letter calling his attention to the item, and he sent us a check for \$2.50. We took the check to the bank for collection, and our bank deducted 15 cents for collecting, leaving us \$2.35. But his bank wanted 25 cents, so they deducted 25 cents more, and sent \$2.10 to our bank. We spent 10 cents for postage, and at the end of four months we received \$2 out of the sale. That wasn't a real profitable deal. But it is a fair example of extravagant methods of doing business. There are 28 Hardware salesmen covering the State of Iowa; more than one for every day of the month. More extravagance on the part of the jobber. When we can operate on more mutual lines, and eliminate unnecessary expenses, mutual disposition to assist each other will develop our business along the most economical lines. It will be a mutual advantage to the retailer as well as the

jobber, and no one will suffer. I understand they have now up in this legislature, though I do not come in connection with it, a bill to prohibit a retailer from selling his stock without giving notice of it. No honest dealer should object to it, if he understands it fully. I have advocated two or three times the fact that as engineers, plumbers and barbers are licensed, we ought to license the business man. I venture to say that I would appoint a board of three or five men in this convention and let them examine a candidate for business, who wants to engage in business, that his idea would not be along such lines that you would feel that you wanted him for a competitor. Not like my friend, who bought a thing for 50 cents and sold it for \$1.75, but would be like the man who buys a thing for 10 cents and sells it for 15, and thinks he has made 5 cents.

In conclusion, gentlemen, I want to say a word or two about increasing your membership. I do not want to trespass on anybody else's ground. I wanted to make this suggestion. You cannot increase your number any



FRANK HACKER, Third Vice-President.

quicker than by enlisting the traveling men in it. Do not do it along financial lines; that would put it on a business proposition. Do it along friendly lines, and say to them that if they want to do you a good turn, that if there is any one on their line who is not a member, get him to join the association. Along that line you could add 300 new members to your list. We have got five men in the State of Nebraska, and every one of these men is at your service. I believe that advantages are secured by the retail dealers getting together, talking over their business matters, getting an idea as to what is an adequate profit, and that just competition is as much in the interest of the jobber as it is in the interest of the retail dealer himself. If you decide to do it, we shall be very glad to have you come to Omaha. We will give you the best we have, and while we haven't got very much, the best thing we can give you is at your command. We cordially welcome you, and will give you the glad hand any time you feel disposed to come and see us.

#### Members Present.

W. C. Klein, Milford.  
N. Edberg, Stromsburg.  
Frank Uhlig, Falls City.  
H. E. Olson, Stromsburg.  
A. Degner, Norfolk.  
W. Gaebler, Winside.  
Degner & Becher, Wisner.  
Geo. Morhart, Red Cloud.  
D. Jones, Guide Rock.  
F. H. Ranslem, Scribner.  
Frank Hacker, Friend.  
J. C. Wright, Ashland.  
D. Casey, Johnson.  
W. E. Carney, Talmage.  
A. Shimonck, Wilber.  
J. J. Vlasak, Prague.  
A. E. Small, Crete.  
Swan & Son, Auburn.  
N. F. Lane, Phillips.  
T. F. Holloway, Fremont.  
Thos. Nelson, Diller.  
C. K. Lawson, Hastings.

F. J. Hoerger, Sutton.  
Fred. Pelz, Blue Hill.  
C. Newman, Hampton.  
Chapin & Dewey, Fairmont.  
Jennings & Spaulding, Gothenburg.  
W. M. Stebbins, Gothenburg.  
C. T. Moore, Alma.  
L. A. Higgins, Harvard.  
F. C. Mather, Aurora.  
Thone & Farnberg, Blair.  
Lundt & Arndt, Blair.  
C. A. Peterson, Oakland.  
J. Hussie, Omaha.  
J. B. Thomas, Lyons.  
Kennedy Bros., Genoa.  
Scammon & Son, Friend.  
S. C. Oaks, Seward.  
A. S. McDonald, Eagle.  
J. S. Nesbitt, Waterloo.  
M. A. Harglerode, Holstein.  
Dan Kavanaugh, Fairbury.

C. G. Dahlstrom & Son, Cresco.  
Alex. F. Meyer, Hastings.  
K. Barns, David City.  
Leon Baker, Omaha.  
H. Veith, Lincoln.  
Ernest Hoppe, Lincoln.  
J. A. Boggs, Lincoln.  
H. J. Hall, Lincoln.  
John Zimmerer, Seward.  
C. Fetterman & Son, German town.  
Abbott Bros., Unadilla.  
Milton Rogers & Son, Omaha.  
J. C. Beckheimer, Clatonia.  
F. D. Kees, Beatrice.  
J. C. Cornell, Ord.  
C. H. Rudge, Lincoln.  
Frank E. Lahr, Lincoln.  
Jas. Morton & Son Co., Omaha.  
Hartman & Bullock, York.

D. Geiselman, Genoa.  
J. F. Goehner, Seward.  
W. E. Babcock & Bros., Cambridge.  
Theo. Sinholt, Omaha.  
Petersen & Michelsen, South Omaha.  
J. H. Heine, Hooper.  
J. A. Hyder, York.  
Lehmkuhl & Wenstrand, Wahoo.  
W. H. Winterbotham, David City.  
Stratton & Hanson, Wahoo.  
W. W. Scammon, Auburn.  
N. Roberts, Omaha.  
H. M. Rogers, Omaha.  
E. C. Kinsel Bros., Wisner.  
J. A. Armstrong, Auburn.  
R. H. McAllister, Grand Island.

#### Other Visitors.

Frank P. Tenney, Smith & Hemenway Company, New York.  
R. M. Clark, Clark, De Long & Co., Omaha.  
R. L. De Long, Clark, De Long & Co., Omaha.  
William Patterson, Empke-Shugart-Hill Company, Council Bluffs, Iowa.  
Chas. E. Mearns, Voss Bros. Mfg. Company, Davenport, Iowa.  
W. H. Voss, Voss Bros. Mfg. Company, Davenport, Iowa.  
L. H. Riffel, Fuller-Warren Company, Milwaukee, Wis.  
Sam T. White, White Lily Washer Company, Davenport, Iowa.  
Wm. Patterson, Jr., White Lily Washer Company, Davenport, Iowa.  
Chas. Smith, Chas. Smith Company, Chicago, Ill.  
W. V. Slaker, Rathbone, Sard & Co., Aurora, Ill.  
Miss Annie B. Porter, World Mfg. Company, Pittsburgh, Pa.;  
E-Z Mfg. Company, Galesburg, Ill.; Young Mfg. Company, Bellevue, Iowa.  
James T. Newell, *The Iron Age*, St. Louis, Mo.  
M. L. Corey, secretary National Hardware Dealers' Association, Argos, Ind.  
Sidney P. Johnston, the *American Artisan*, Chicago, Ill.  
T. F. Bartlett, Bartlett & Norris, Lincoln, Neb.  
E. E. Moequett, Lee-Glass-Andresen Hardware Company, Omaha, Neb.  
R. T. Van Brunt, Lee-Glass-Andresen Hardware Company, Omaha, Neb.  
A. Parmelee, Lee-Glass-Andresen Hardware Company, Omaha, Neb.  
E. P. Berryman, Lee-Glass-Andresen Hardware Company, Omaha, Neb.  
S. Leonard, National Cash Register Company, Dayton, Ohio.  
G. A. Yates, National Cash Register Company, Dayton, Ohio.  
H. O. Spencer, Richards Mfg. Company, Aurora, Ill.  
S. R. Batson, Rock Island Stove Company, Rock Island, Ill.  
Matt R. Bingham, Michigan Stove Company, Chicago, Ill.  
W. S. Wright, Wright-Wilhelmy Company, Omaha, Neb.  
J. H. Harberg, Wright-Wilhelmy Company, Omaha, Neb.  
C. E. Doughty, Lennox Mfg. Company, Marshalltown, Iowa.  
J. F. Little, Bridge & Beach Mfg. Company, St. Louis, Mo.  
O. F. Little, Bridge & Beach Mfg. Company, St. Louis, Mo.  
C. G. Johnston, *Trade Review*, Lincoln, Neb.  
W. H. Wood, Thomas White Stove Company, Quincy, Ill.  
L. W. Garroutte, American Steel & Wire Company, Chicago, Ill.  
R. F. Clarke, Chicago, Ill.  
R. B. Nixon, E. C. Atkins & Co., Indianapolis, Ind.

#### CONVENTION NOTES.

The convention was a very enthusiastic one and much enjoyed by those in attendance. The association has shown remarkable growth since its organization a year ago. It now includes many of the largest and most enterprising merchants in the State, and a very active and persistent canvass will be made before the next meeting to enroll a majority of the Hardware dealers in the State.

The Fuller-Warren Company of Milwaukee, Wis., were represented by L. H. Riffel, who presented as a souvenir of the company a very neat and useful celluloid postage stamp case.

In charge of Miss Annis B. Porter were exhibited samples of the World's Best Can Opener, made by the World Mfg. Company, Pittsburgh, Pa., and Young's Combination Strainer and Cut Off, the product of the Young Mfg. Company of Bellevue, Iowa.

The Lennox Mfg. Company of Marshalltown, Iowa, showed a small model of their Torrid Zone Furnace and distributed a circular calling attention to their line of goods.

Rathbone, Sard & Co., represented by W. V. Slaker, distributed a very neat souvenir stick pin, formed of a silver acorn. This souvenir was much in evidence among the members.

H. O. Spencer, treasurer of the Richards Mfg. Company, Aurora, Ill., distributed a very neat and useful souvenir in the form of a leather bill case. This souvenir was much sought after and appreciated for its usefulness.



The American Steel & Wire Company, through their representative, L. W. Garrouette, exhibited samples of Elwood Steel Fences and distributed a neat catalogue referring to this line.

The National Cash Register Company displayed one of their No. 95 Multiple Drawer Cash Registers. This exhibit attracted much attention and was in charge of S. Leonard and G. A. Yates, their traveling representatives in Nebraska. A stick pin *fac-simile* of a Cash Register was given away.

Hardware conventions are hardly complete without at least one representative of E. C. Atkins & Co. of Indianapolis, and this gathering was no exception to the rule. The company were represented by R. B. Nixon, who displayed in Parlor B about 25 varieties of Saws of different grades. A deck of superior gilt edge cards was given as a souvenir.

The Voss Bros. Mfg. Company of Davenport, Iowa, exhibited one of their well-known Ocean Wave Washers, and the representatives in charge, Wm. H. Voss and Chas. E. Mearns, had many new and old customers to entertain.

The E-Z Mfg. Company of Galesburg, Ill., represented by Miss Annis B. Porter, exhibited specimens of their Mouse Trap, and were liberal in the distribution of samples among the members present.

Sam T. White of the White Lily Washing Machine Company, of Davenport, Iowa, exhibited the White Lily Washing Machine and explained its merits to the dealers in attendance. A very good imitation of a Lily was given away liberally, in a striking and prominent way calling attention to the goods of the company.

Charles Smith of the Charles Smith Company, Chicago, Ill., exhibited a No. 144 Hero Furnace, and was kept busy explaining its merits to the trade.

R. F. Clark of Chicago, Ill., the well-known manufacturer of Huskers, supplied circulars illustrating and describing the 1903 models of this line.

### NASHVILLE NOTES.

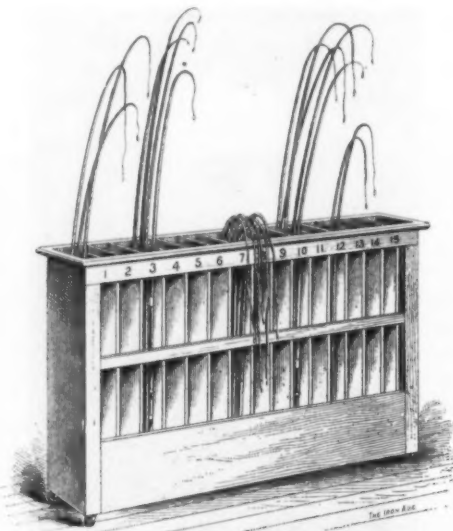
THE GRAY & DUDLEY HARDWARE COMPANY'S store at Nashville, Tenn., has often been referred to as one of the finest Hardware establishments in the United States, and justly so. It is six stories in height, with basement, and has a frontage of 75 feet; it is 235 feet in depth and contains 2¾ miles of aisles. The first floor is occupied by their retail department and offices, with shipping room in the rear. The retail department is admirably arranged for handling a large number of customers without inconvenience, the aisles being wide and the goods so arranged as to be easily handled. The shelving and fixtures in this department were installed by the J. D. Warren Mfg. Company of Chicago. The second floor carries their stock of House Furnishing Goods, Cutlery department and catalogue room. A room on this floor is set aside for the use of the window dresser, who has all the facilities for planning the displays which this company make in their show windows. The third floor is devoted to Shelf Goods; and the fourth to Saddlery Goods of all descriptions, of which this company handle immense quantities. The fifth floor carries their stock of Steel Goods and Wagon Material. The entire establishment is fitted with automatic fire extinguishers. A private telephone exchange is operated, so that instant communication may be had between the different departments. The building is equipped with three freight elevators, each of 5000 pounds capacity, and one passenger elevator. The company have at the present time 35 traveling representatives on the road, and are constantly adding to this list.

Keith, Simmons & Co., Nashville, have recently moved from their old location on North College street

to 316 and 318 Union street, where they have an admirably arranged building particularly adapted for their needs. The building is 48 x 145 feet, and consists of four floors, with basement. The retail department occupies the entire first floor. In this department the matter of arranging goods for display has been given consideration, and a number of striking innovations in this direction have been installed. The two large show windows are electric lighted, the lights being so arranged as to be invisible from the sidewalk, and the effect is extremely striking. In addition to this building the company also occupy a warehouse, 65 x 115 feet, in which they carry their stock of Barb and Plain Wire, Wire and Cut Nails and Heavy Goods. They have a large yard adjoining their warehouse in which they carry their stock of Pipe, Grindstones, &c.

### A RACK FOR HOLDING WHIPS.

THE rack shown in the accompanying illustration is kept filled with Whips and is placed outside of the store of Hull Bros. Company, Danbury, Conn., during

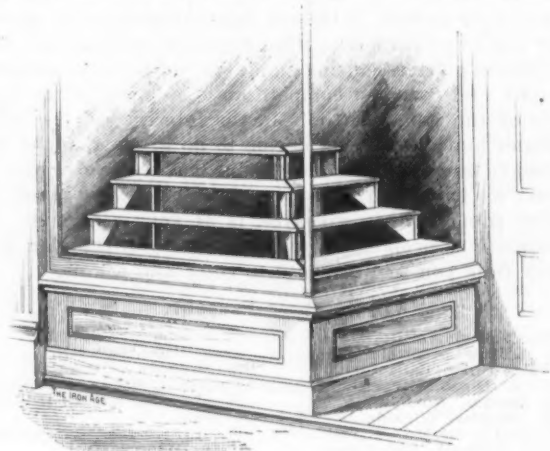


A Rack for Holding Whips.

the day time. It shows the Whips off to good advantage and displays this line in a way which is unusual.

### A WINDOW DISPLAY STAND.

A WINDOW display stand, such as is shown in the accompanying illustration, is in use in the store of E. H. Lawrence, Stamford, Conn. The peculiar feature of the stand is that it consists of two separate



A Window Display Stand.

parts, each of which is a separate stand in itself. The division lines between the two stands are clearly shown in the illustration. The advantage of this arrangement is that the stand can be put in and removed from the window much more easily than if one large stand were used.

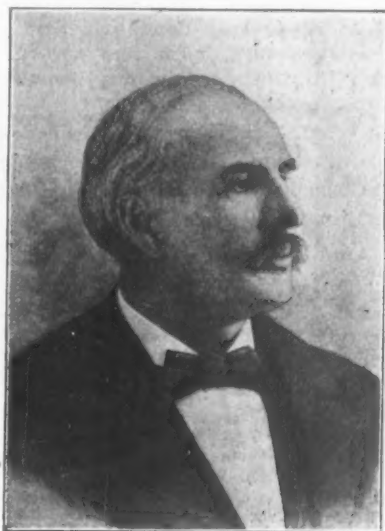
# Minnesota Retail Hardware Association.

## CONCLUDING REPORT.

**T**HE seventh annual convention of the Minnesota Retail Hardware Association was held at Minneapolis on February 26, 27 and 28. The meetings were held in Convention Hall, Masonic Temple. When the convention was not in session the delegates and representatives of manufacturers and jobbers made their headquarters at the Hotel Nicollet, although many were obliged to find accommodations at the Hotel Vendome and the West Hotel. The convention was the largest, the most enthusiastic and one of the most important that the association has ever held. Fully four-fifths of the entire membership—of 511—were present and with the guests over 500 attended the open sessions. The Minnesota association is conspicuous for its solidity and strength and the harmony among its members.

### Mayor Haynes' Address of Welcome.

The convention opened under favorable auspices shortly after 2 o'clock on Thursday afternoon. Mayor Haynes of Minneapolis welcomed the delegates cordially



W. H. TOMLINSON, President.

to the metropolis of the Northwest, delivering into their hands the keys of the city. Mr. Haynes said in part:

It is my very pleasant duty at this time, as Mayor of the city of Minneapolis, to welcome you to our midst, to our hospitality, to our good offices and to all the city can extend, not to the stranger within our gates but to our own people. You come from all parts of this splendid commonwealth, the State of Minnesota, in which we take an ever growing pride, a pride that is not undue, a pride that is natural, rational and well. I know nothing that makes more for good citizenship than an honest pride in one's own community, in one's own commonwealth. I know of nothing which makes more for the substantial advancement of any civilization than the honest, intelligent co-operation of a body of men engaged in any common undertaking or calling. I think this is especially true of the commerce of the country. We often hear it said that men in commerce, men trying to make a living, a better living, something more than a living, are simply in the pursuit of the almighty dollar and some of them grow bald-headed about it. But it has been said that except in extreme cases there is no truth in that, but that it absolutely misrepresents the average citizen and the mass of citizens engaged in commercial pursuits.

I notice in looking over your programme that you are about 500 strong. I notice that you are organized for the purpose of promoting the right kind of trade; that you realize the value of intelligent co-operation

and that you do not believe in illegitimate competition. Competition is a kind of warfare in commerce and men do not always battle with the right means. Some of you have been in the Hardware business for years and you believe that you have done your best and that you have done it right. That is the best wish I can give you, because I believe you are working along willing, intelligent lines of co-operation. You realize that in co-operation there lies a greater degree of safety than in conflict. The world is discovering that more and more. All the great world of commerce, the world of intellect, the spiritual and moral world are full of groups just like yourselves, all working for some particular end, but all working in obedience to that great principle of co-operation and intelligence. I believe that you are men who are not irrational, who believe that this working together is the formulation of a trust. I believe and I know that you believe that there are instances in this country where the principle of co-operation has resulted in absolute monopoly and that there is a question which all good citizens, regardless of politics, regardless of party violation, must consider. I know that you are good citizens; that you realize this is a fact. I am not offering you a solution; it would be improper for me to do so. What I merely want to suggest is that in every way in which we can get together and take from the bank of information—real honest information—we should do so, and that we should take advantage of every conceivable opportunity which will put it in our power to intelligently stand for what we know to be right, regardless of politics or party. I am here to speak to you because it is the proper thing to do—to say something to welcome you to our border. I can't offer you everything. Perhaps you may not find what you would have found a few months ago. There are not as many chances now to make money. (Laughter.) But you will find some opportunities yet. We do not claim that Minneapolis is perfect; we know that St. Paul is not perfect. But we love St. Paul—that is honest. We do for a fact. We would like to have her closer than she is—not further away. This is not merely Minneapolis, the ninth city of the United States, that greets you. Mayor Smith, I am sure, will not object if I take the responsibility to welcome you to the metropolis of the Northwest. He is glad to see you here, just as glad as we are. If we can't be broad gauged, we can be just as big and fair and honest as it is in us to be. You know we are glad to have you here. We have good theaters; we have good hotels; we have the Commercial Club, but most of all we have the hearts of our people and they are open to you. We do not say, like Jackson speaking of the British soldiers, "We will welcome them to hospitable graves with bloody hands." On the contrary, we welcome you with outstretched hand and I extend to you the absolute freedom of the city. The Mayor of this city, they say, has no power except over the police, and there are instances where he does not have all power over them. All I can guarantee you is that when you go into the busy marts and business places of the city you will find free progress and that you will not be held up by any policeman. We won't allow anybody else to hold you up if we can help it. You tell them you are a particular friend of Mayor Haynes and you will get away all right. We always give you the keys to the front door of the city; sometimes to the back or side doors. But we give you the keys to the front door, and if you want the others you can doubtless get them upon special request of myself. Once more I welcome you to this municipality and wish you a most pleasant and profitable convention.

### Response by J. F. McGuire.

J. F. McGuire of St. Paul, on behalf of the association, responded to Mayor Haynes, his remarks being



## Minnesota Retail Hardware Association.

punctured with the ever ready native wit of a true son of the Emerald Isle:

Honored Sir: The organized retail Hardware dealers of Minnesota return our grateful thanks to you, the Chief Executive of the metropolis of this State, for the words of welcome extended to us. We appreciate fully the earnest enthusiasm of your citizens. This city is no new place for us. We have met here before and we were anxious to come again. We come from the hustling little cities, the cross roads, the county seats of this State, from the Canadian boundary to the Iowa line, from Big Stone or Red Wing. We know much and have heard more about this city.

Walking along Washington avenue this morning, I asked a little newsboy to tell me where some of the busy places in the city were located. Quick as a wink he pointed to the Court House and said: "That was a busy place last fall, but since Mayor Haynes was elected they are not doing much in that line." Right here I want to



H. S. CLEVELAND, Vice-President.

remark that Minneapolis and St. Paul are governed in their public administration better than any other municipality in America having a population of 400,000 souls.

The Hardwareman is, as you know, more or less of an expert on Locks, and if need be, many among us could "pick" any Lock in Minneapolis. Rest assured, Mr. Mayor, however, that if any "picking" is done during the next three days you can tell Mr. Conroy, your Superintendent of Police, that the Hardwaremen are not guilty.

The citizens of the State are justly proud of the trip-let cities of Minneapolis, St. Paul and Duluth, each having distinctive features not possessed by the others. The size and importance of a community is pretty well established by the report of its transportation facilities. The Twin City Rapid Transit Company carried on their lines last year the entire population of the United States. In other words, nearly 75,000,000 of people rode on the street cars of the twin cities last year. Good as the service is, there's room for more—not more passengers—but more cars. You can ride in the summer time from Lake Calhoun to Wildwood—25 miles—and have to stand up all the way. A stranger from New York was forced to do this last season, and after hanging onto the strap for 20 miles he said: "Have none of you men got a home?"

We, the common citizens, little realize the tremendous possibilities of this State. Why, we are yet in our nursery clothes—1,751,394 people live on 83,000 square miles, only 21 people to each square mile. You and I, Mr. Mayor, will, I trust, live to see the day when our population will be trebled.

In white pine lumber we beat all of our neighboring

States; in wheat we have the call, and on butter we smear them all. As an iron producer we put every other State in the shade; 15,000,000 tons of iron ore last year, the greatest output of any State in the history of the world, being 40 per cent. of the total iron ore produced in the United States. Not only in lumber, wheat, butter and ore are we pre-eminent, but only a dozen States surpass us in the volume of manufactured goods.

The transportation facilities of this State are the best in the Union. Immense and far reaching railroad lines, river and lake outlets, the longest, deepest and safest in the world. Figures sometimes mystify, but when you tell your children that there were as many bushels of Minnesota and Dakota wheat passed through the Soo Canal last year as there are men, women and children in the United States, then the boy in the fifth grade can understand.

It is not alone in these material things that the North Star State is great, but she is known all around the world on account of the great men who helped to make her what she is. Pillsbury, the philanthropist; Davis, the statesman; Whipple, the churchman, now gone to their eternal reward, have made Minnesota great. Ireland, the humanitarian; Hill, the financier, and Northrup, the educator, will keep her great so long as life is spared to them.

And now, Mayor Haynes, let me again thank you for your generous hospitality. While all here present may not be able to shake your hand, they will pass your cheering greeting around, and in that way each will experience the grip, which, by the way, most of us have already—with la prefixed.

President W. H. Tomlinson of Le Sueur delivered his annual address, congratulating the association upon its strength and harmony and rapid growth. This address was published in our last issue.

### Announcement of Committees.

The appointment of the following committees was announced by the chair:

INSURANCE: A. C. Hatch, Battle Creek; Jas. E. O'Brien, Crookston; J. R. S. Cosgrove, Le Sueur.  
PRESS: H. O. Roberts, Minneapolis; C. H. Casey, Jordan; C. D. Decker, Austin.  
GRIEVANCES: T. Coaley, Princeton; Mr. Heins, Renville; H. H. Heyden, Chatfield.  
RESOLUTIONS: A. T. Stebbins, Rochester; G. M. Evenson, St. Peter; P. Nelson, Red Wing.  
AUDITING: Geo. F. Derre, Plainview; Mr. Boehme, Minneapolis; Mr. Le Roy.

### Nominating Committee.

At this point a recess of 15 minutes was taken to allow the delegates of the various Congressional districts to select the members of the Nominating Committee. The committee thus chosen was as follows, which was announced upon the reconvening of the association after the recess: 1. A. T. Stebbins, Rochester; 2. D. E. Maxson, Blue Earth; 3. J. R. S. Cosgrove, Le Sueur; 4. J. F. McGuire, St. Paul; 5. H. S. Cleveland, Minneapolis; 6. Chas. F. Lander, St. Cloud; 7. H. F. Dahl, Brownesdale; 8. B. W. How, Duluth; 9. J. E. O'Brien, Crookston.

### In Memory of George Mason.

Mr. Evenson suggested that a committee be appointed to draft suitable resolutions expressing regret for and offering the condolence of the association to the family of the late George Mason of St. Peter. The suggestion of Mr. Evenson was acted upon, Messrs. Evenson, Cosgrove and Stebbins being appointed by the chair.

### Mr. Houghtaling's Paper.

A paper upon "What I Know About Selling Hardware," by E. Houghtaling of Fairmont, upon request of the president, was read by Mr. Evenson of St. Peter, Mr. Houghtaling being prevented from attending the convention by illness.

The paper of Mr. Houghtaling gave evidence of thoughtful consideration, and touched upon many points of special interest to the association. It was published last week.

Upon motion a vote of thanks was extended to Mr. Houghtaling for his able paper and his thoughtfulness in forwarding his composition when he was unable to attend.

### Annual Report of the Secretary.

Secretary M. S. Mathews read his annual report, as follows:

As our association year begins and ends at our annual meeting, it is probably better that a statement of financial condition should cover the same period. This statement has been made to include the present month of February and up to March 1. On March 1, 1902, there was a balance on hand of \$108.07, which, with the fees and dues for the year, amounting to \$1451.20, make the total receipts for the year \$1559.27. The disbursements for the year ending March 1, 1903, were \$2549.19, leaving a balance in the treasury of \$100.08.

If you examine this statement you will notice some very attractive figures. Our dues receipts increased from \$940 in 1901-02 to \$1451 in 1902-03, a net gain of 55 per cent. Roll call at the commencement of this session showed you the very comfortable list of

#### 511 MEMBERS OF THIS ASSOCIATION IN GOOD STANDING.

Even in the older and more populous States, where the number of Hardware dealers is much greater, no one of them even approaches Minnesota's showing.



M. S. MATHEWS, Secretary-Treasurer.

Last fall, at the suggestion of President Tomlinson, your secretary made a series of short trips in search of recruits for this association, dividing the expense between the Hardware association and the insurance company. The results proved the wisdom of the advice, as about 50 per cent. of the dealers approached joined our organization, a large percentage also placing insurance with our company.

In these days of combination and co-operation the average Hardwareman has been brought to believe that it is a good thing to be a member of a strong association, where united effort accomplishes much that the individual cannot hope to gain. With the favorable commercial conditions prevailing the past year, it would seem as if there were fewer temptations for our jobbers and manufacturers to step outside the ordinary trade methods in looking up new business. For, although we have a largely increased membership, complaints are more rare than in previous years, only one remaining unadjusted at the present time. In the few cases where your secretary had occasion to confer with the jobbers regarding some grievance of our people he was met in a most friendly spirit, and a disposition was shown to remove all friction at the earliest possible moment.

#### FIRST PLACE AMONG HARDWARE ASSOCIATIONS.

Our organization to-day occupies first place among Hardware associations in America, and it is hoped that awakened interest may continue and increase until prac-

tically every Hardware retailer in this great commonwealth may be counted on our side.

Our insurance annex doubtless attracts many who would not otherwise give this movement the attention it deserves; but with the assistance of the present members we have reason to believe that our growth in numbers and prestige in the next 12 months will duplicate our advance in the year just closed. I would wish to add that in the discharge of the peculiar and manifold duties of this position, new to your present secretary, whatever success may have been attained is largely owing to the hearty co-operation and wise counsel of your officers and the Executive Committee.

Aside from the business proceedings, there is much of amusement and entertainment in this three days' programme, and if there is anything that particularly pleases you, remember that the liberality of our numerous advertisers made it possible.

Upon motion the report was accepted, as was also that of the treasurer, which showed receipts of \$1518.02 and disbursements of \$1456.94, leaving a balance on hand of \$61.08. Subsequently additional receipts brought the balance on hand at the end of the fiscal year to \$100.08.

### Election of Officers.

The Nominating Committee recommended the re-election of W. H. Tomlinson of Le Sueur for president and H. S. Cleveland of Minneapolis for vice-president. As members of the Executive Committee for three years the committee recommended the following: C. H. Hornberg, New Ulm; Julius Schmidt, Wabash; W. T. Cewing, Alexandria, and C. H. Casey of Jordan.

The report of the committee was accepted, and subsequently, upon motion, the nominees were unanimously elected, the secretary being instructed to cast the vote of the association.

### Acknowledgments.

President Tomlinson thanked the association for again selecting him as president of the association, expressing his gratefulness for the indorsement of his executive action during the past two years.

Vice-President Cleveland also thanked the association for their renewed confidence, and spoke at length upon the insurance feature of the association, which not only is becoming, but is, a very important feature of the association work. Concluding, he said:

"I think there are a great many men who can be persuaded to join the association and take some insurance. One thing that struck me in a great many of the towns, small towns I visited recently, was the apparently increased volume of business being done, but the decreased profits. I figure it out along these lines, that they are increasing their volume but decreasing their profits by increased competition. I would like to hear remarks from some of the members of this association along the lines of increased profits. This is something we all need. Profits are being cut here and there, and with the co-operative work that is being done and our getting together we ought to study that feature."

### Local Organization.

Mr. O'Brien of Crookston suggested that Mr. Roberts of Minneapolis address the convention upon some interesting questions. In responding Mr. Roberts said that he thought many of the dealers were working on too narrow a margin in selling their goods. And to accomplish a desirable end he referred especially to the benefits derived from local organization, explaining to the association something of what had been accomplished in Minnesota during the preceding year. Referring to the irregularity of retail prices, Mr. Roberts said:

"There are a great many men who don't know how to mark their goods. They hear that a No. 7 Disston Saw is being sold at a certain profit, and that Nails are being sold at a certain profit and they figure out what they can make on it at selling it at a certain price. There is no reason why one dealer should sell a 6-inch Strap Hinge for 10 cents, another for 15 cents and another for 20 cents."

Mr. Roberts was followed by Mr. Pease, referring to local organization on the lines spoken of by Mr. Rob-



## Minnesota Retail Hardware Association.

erts. "A point which might be spoken of," he said, "is that there are so many lines in the Hardware trade that the catalogue houses and the department stores do not handle that the Hardwaremen can make a good profit on. We pay particular attention to holiday goods. By adding to and increasing our line we have worked up a good sale in fine Cutlery, including Plated Ware, Tea and Coffee Pots, Cut Glass, Sterling Silver and Art Ware. The latter goods help to decorate the store, add to the appearance of the store, and we have practically no competition. Last year our sales for December on just this line of holiday goods amounted to \$2400."

### Parcels Post Bill.

Mr. McGuire suggested that as M. L. Corey of Argos, Ind., secretary of the National Association, was present he be requested to address the association. President Tomlinson, reading one of the questions which was taken from the Question Box, "What shall be done to defeat the Parcels Post bill?" invited Mr. Corey to speak to the association upon that question. After some preliminary remarks, Mr. Corey said:

"The parcels post contemplates carrying packages from 5 to 100 pounds at a nominal price for any distance. That bill is before the legislature in the hands of a committee where we hope to keep it; and if perchance that committee is so constituted that the bill will receive favorable report and come before Congress nothing but concerted action on our part will defeat it. There is in Boston to-day a Parcels Progress League. No one outside of the League knows who furnishes the money to carry it on. They are seeking to gain control. It will be a hard thing for us to combat that movement because they consider at once that we are interested parties. So to defeat that bill so long as we are able is our only course. I want to say that the National Association has made every effort to keep the matter in the hands of the special committee. So long as the present committee is there and has power to control it it will be safe. But on the other hand there are men who are working all the time to get influence, to get office. If this measure does come up before Congress not only should you do your duty by writing to your Congressman and your Senator but you ought to see every merchant in your town. We are ready enough to condemn but not ready enough to work. The only power is in united action when the time requires it. If you want to make your influence felt you can't do it by finding fault; you must do it by doing what you can. Do not expect the other fellow to do it; do it yourselves. And if that bill comes up it remains for you and the merchants in Iowa, New York and all other organized States to defeat it. "I always get some idea of different things from every convention that I go to. I like the idea of putting in art ware. It could be put in to good advantage. Two years ago in my own business we had been trying to sell different kinds of woven wire fence but had such awful poor luck with it that we hated the sight of it. But at a convention I attended the boys got together in a little experience meeting and told about how much wire they were selling. Some had sold a carload and some five carloads. That seemed incredible to me because I hadn't been able to sell over eighty rods. After I went home a salesman came to us with some woven wire. I was away at the time from the office and he talked with my partner. But my partner, who had the same views about it as myself, didn't want any wire. The salesman wanted to see me and later when I came in he endeavored to sell me some woven wire. I at first told him as had my partner but he finally persuaded me to try eighty rods. Gentlemen, from that eighty rods we have sold nearly 12 carloads in the two years, making a clean \$1,000.

Upon motion the convention adjourned until Friday morning.

### FRIDAY MORNING SESSION.

Upon being called to order on Friday morning President Tomlinson introduced Mr. Schulenberger, presi-

dent of the Northwestern Furniture Exposition, at St. Anthony Park. Mr. Schulenberger congratulated the association upon the Hardware organization, which he understood to be the strongest, largest and best of its kind in the United States. He also hoped that the association would not rest until they had secured the membership of all the Hardware dealers of the State, which number 1000. He then explained to the delegates what the Furniture Exposition was accomplishing and invited the delegates to be the guests of the Exposition at dinner. A rising vote was taken thanking Mr. Schulenberger for his courtesy, and many of the delegates availed themselves of the kind invitation.

### Meeting of Insurance Policy Holders.

President Tomlinson of the Hardware association then resigned the gavel to President Ladner of the Insurance Department, upon which President Ladner made an interesting report of the affairs of the association, as follows:

### Insurance President Ladner's Address.

After another year of struggle with our own business interests, it again becomes our duty to render you an account of the stewardship of the affairs of this company. It is with ever increasing pleasure that I look forward to these annual meetings, to renew again and



CHAS. F. LADNER.

establish, if possible, more firmly the friendship formed among my fellow Hardwaremen of the State of Minnesota during the last seven years.

When we look back to the year of 1896 and follow the growth of our association, and later on of this insurance company, when we think about the difficulties we had to encounter, the prejudices we had to overcome, the often times depleted treasury staring us in the face, and then contemplate the prosperous condition of the Hardware trade at present, the improved methods of doing business, the better feeling and understanding existing between competitors in their respective towns, I again repeat it is a pleasure to renew and strengthen our friendship.

Our pleasure of to-day though, is tinged with a shadow of sadness at the thought that one who has done so much to bring our association and company to its present prosperous condition, is no more. Through the untimely death of our late Secretary, Thos. McCracken, our association lost one of its most faithful servants. His long experience in the wholesale and retail Hardware business and as traveling salesman fitted him peculiarly for the position he held. Coupled with his experience was a strong will and an energy and capacity for work seldom found in men much younger than he. Let us sincerely hope that he has received the reward he so richly earned, and let us extend to his bereaved family our most heartfelt sympathy.

PROSPEROUS INSURANCE COMPANY.

Our insurance company has again had a most prosperous year, and although our losses during the last month of the year were unusually heavy, we show a healthy cash balance on hand. You will note from the secretary's report and from the printed statements handed you that at the end of our fiscal year, December 31, 1902, we had insurance in force amounting to \$854,439, an increase from that of December 1, 1901, of \$319,364, or nearly 60 per cent. Our cash balance on hand for the same date in 1901 was \$11,196, and for 1902, \$17,484.37, an increase of \$6288.34. In 1901 we paid in losses \$2344.98, in 1902 \$7752.22. In addition to these losses paid in 1902, we also paid the members of our company either in cash or rebate in reinsurance the sum of \$3041.19. Now, although our losses in the latter part of 1902 were unusually heavy (perhaps heavier than they ever will be again in such a short period), we show practically the same ratio of cash on hand to the amount of risks covered as we did in 1901, being in the former case about 20 9-10 per cent., and in the latter 20 4-10 per cent., or, to put it still more plainly to you, we hold in cash on hand the 10 per cent. reserve required by law, amounting to \$8544.39, will allow you a dividend of 25 per cent. in cash or reinsurance, and hold in hand beyond these two accounts \$4081.74, or almost another 25 per cent.

In the face of these facts, it would scarcely seem necessary to have to urge the Hardware dealers of the State of Minnesota that it is to their interest and profit that they avail themselves of the opportunity of saving money by placing part of their insurance with us, and yet about one-half of them are still outside.

COMPARISON OF STOCK AND MUTUAL COMPANIES.

According to the report of the insurance commission of the State of Minnesota for the past year, joint stock companies made a profit of 20 per cent. on their business in this State. He says that the total risks by foreign companies were \$61,412,189; premiums received, \$1,088,545; losses incurred, \$441,298; percentage of losses incurred to premiums received, 40 per cent., so it took the difference between the 20 per cent. dividends and 40 per cent. loss to carry on their business. Kindly compare this expense account with ours and draw your own conclusions.

In 1901 the same class of companies, with risks to the amount of \$65,069,971; premiums received, \$1,085,570; losses incurred, \$501,827; per cent. of losses incurred as to premiums received, 46.22 per cent., a difference between losses and premiums of 53.78 per cent., and yet, for self protection these same companies have to increase their rate in the spring of 1902 from 20 to 25 per cent. Does this not justify us in demanding your business?

Minnesota was the first State to organize the most vigorous, effective and successful Hardware association, and the only one to organize a Hardware dealers' mutual fire insurance company; but, gentlemen, in this insurance matter you want to look out that this advantage of having the first and only successful fire insurance company is not wrenched from you. Already several other States have organized companies similar to ours, and in the States of Indiana, Missouri, Iowa, Illinois, North and South Dakota the matter of mutual insurance has played a very conspicuous part in their meetings, and the subject was discussed by their ablest men, and in most every instance favorable mention was made of our plan.

AS OTHERS SEE US.

Former President McIntire of Iowa, in speaking of our company, said: "The growth of the Minnesota insurance department has been in a sense phenomenal. It has shown a steady growth in point of members as well as amount of insurance in force." Former President Schlaefer of Wisconsin states: "I wish to call particular attention to the splendid showing by the insurance department of the Retail Hardware Dealers' Association of Minnesota and to the benefits of which every member of our State Association is entitled." I am glad to recommend this department as worthy of your patronage, and have availed myself of the opportunity of placing \$3000, the full limit, of my insurance with them. Go thou and

do likewise, and thereby save for yourself from \$15 to \$50 per year."

In conclusion, I desire to most sincerely thank the directors of this company for the prompt way in which they attended our quarterly meeting, and for the deep interest they took in the welfare of this company. Our thanks are also due our efficient secretary, Mr. Mathews, and his assistant, Thos. McCracken, for the energetic and faithful performance of their work during the year. Mr. Mathews has kept me continually posted as to the work on hand, and I have received reports from him regularly twice every week.

Secretary's Report of Insurance Department.

Mr. Mathews' report as secretary of the insurance company was as follows:

Since the date of this report there has been considerable increase in the business, this being the time of year when the policies of the founders of this company are having their third renewal. The business written in January last was \$91,200; gross premiums, \$2124.75; February 1 to 20, \$82,700; gross premiums, \$1920.09. Since the January statement two losses have been incurred and paid: Jas. O. O'Laughlin, Rolla, N. D., partial loss, \$36, and Hanson Bros., Shelly, Minn., a total loss, \$1500. Our cash balance has increased from \$17,484.37,



C. H. CASEY, Member of Executive Committee.

December 31, to \$19,453 on hand to-day. December, 1902, was the most disastrous month in our history, the fire losses being more than twice as great as all our previous losses since organization. Notwithstanding the severe setback at that time, our showing for the year is very satisfactory, our percentage of losses to premiums received being only 39 per cent. With the rapidly increasing business our percentage of expense is gradually lessening, the ratio of expense to premiums received in 1902 being 12 per cent. One of the most gratifying features of this business is that our policy holders renew in almost every case, the exception generally being the going out of business or other equally strong reason. From one-third to one-half of insurance written each month is new business, so that the growth is regular and substantial. The average premium rate in 1900 was \$2.20; in 1901, \$1.90; in 1902 the rate moved up to \$2.29. This does not mean that the risks are more hazardous than formerly, but simply that our rates have followed those of the older companies, which, in most localities, have made a general advance of about 25 per cent.

Your success with mutual insurance has caused the forming of similar companies in connection with Hardware associations in several States. Pennsylvania was the first to follow us. Later came Ohio, and now Iowa is getting in line, while Nebraska and Arkansas are agitating the question. Numerous requests for information



## Minnesota Retail Hardware Association.

and reading matter come from various points in the United States, and not long since a similar letter was received from England.

### EXAMINATION OF THE BOOKS.

There are several letters at our office expressing pleasure at the speedy and satisfactory settlement of losses and a warm indorsement of our mutual insurance. This company have had, within six months, two examinations of their books. The first by the State Auditor in September and the last by the Finance Committee from your policy holders just previous to this convention, and the statements of these gentlemen are hereby submitted:

ST. PAUL, December 3, 1902.

STATE OF MINNESOTA, DEPARTMENT OF INSURANCE.

*Retail Hardware Dealers' Mutual Fire Insurance Company, Minneapolis, Minn.*

Gentlemen: I duly submit herewith report covering result of examination made by this department of the business and financial affairs of your company, as of August 31, 1902, which report verifies the fact that the company's business is being conducted along safe and satisfactory lines. Its finances indicate that the company is fully solvent to meet fully the requirements of the statute relating to mutual fire insurance companies.

The thanks of the department are due to the officers and employees for their uniform courtesy extended during the examination.

Respectfully submitted,

ELMER H. DEARTH,  
Insurance Commissioner.

February 16, 1903.

*To the Retail Hardware Dealers' Mutual Fire Insurance Company:*

Gentlemen: We beg leave to inform you that we have this day examined the books, books of record, vouchers, accounts, trial balances, &c., of Secretary M. S. Mathews for the fiscal year ending December 31, 1902, and find them to be correct. On the day of our examination we find the cash on hand to be as follows:

Certificate of deposit.....	\$17,000.00
Cash in bank.....	1,217.46
Cash in office.....	532.88
Total.....	\$18,750.34

We have also examined the annual report of the company for the year ending December 31, 1902, and find it to be a true transcript of the condition of the company.

We would suggest that policyholders be requested to remit premiums as promptly as possible.

We are pleased to note that all records pertaining to the affairs of the company are kept in a systematic, businesslike manner, very commendable to our secretary.

We are, gentlemen, most respectfully yours,

LOUIS E. WAKEMAN,  
JOHN R. S. COSGROVE.  
Finance Committee.

### TREASURER'S REPORT.

June 20, 1902, received from Treasurer Nelson.....	\$18,678.46
Received deposit slips from the secretary.....	11,573.75
Received interest on certificates of deposit.....	185.00

Total receipts.....\$30,437.21

### Disbursements.

Paid out on orders issued by the secretary.....\$11,220.88

Balance in the treasury.....\$19,216.33

### Insurance on Dwelling Houses.

Mr. Tomlinson said: "At the meeting of the Board of Directors request came from one of the policyholders that the matter of insuring residences owned by members of this association be investigated, and a plan evolved by which that class of insurance could be added to this company. Mr. Stebbins was appointed chairman of this committee."

MR. STEBBINS: In pursuance of the request of the Board of directors I prepared an amendment to the bill already in vogue, allowing this association to include the dwellings and contents when owned by the Hardware dealer, which is as follows:

Amend the constitution of the Minnesota Retail Hardware Dealers' Mutual Fire Insurance Company by adding at the end of Article 3 the following: "And upon the dwelling houses and contents when owned and occupied by its members."

Also amend Article 6 of the constitution by adding after the words and figures in the fifth line the follow-

ing: "On stocks of Hardware and building containing the same and \$2000 on dwellings and contents."

The amendments, as proposed, were referred to the Insurance Committee for action and report to the convention.

### Election of Insurance Directors.

Upon motion a committee of three, consisting of Messrs. Hatch, Caley and Olson, was appointed by the chair to make nominations for directors to serve for a term of three years. An intermission was taken to allow the committee to take action. Upon assembling the committee reported they had nominated C. B. Casey, W. B. Cowing and C. H. Hornberg. The four retiring directors are Messrs. Schmidt, Cleveland, How and Hunt.

Upon motion the secretary was authorized to cast the ballot of the association for the nominees and they were declared elected.

Upon motion the reports of both secretary and treasurer were accepted.

### Amendments Accepted.

Chairman Hatch of the Insurance Committee presented the following report, which was adopted:

We, your committee, to whom was referred the proposed amendments to the constitution, recommend that



H. L. CHAFFEE.

the report be so changed as to allow regular board privileges in length of time a policy may be written for of one, three or five years at option of policyholder; and with this change we recommend the adoption of the recommendations contained in the proposed amendments.

### Finance Committee.

A Finance Committee of three was selected, the appointment being made by the Committee on Nominations and accepted by the convention, the secretary being authorized to cast the ballot which resulted in the selection of the following: Messrs. Decker, Parsons and Evans.

Upon motion the meeting of the policyholders of the Insurance Company adjourned, and the Retail Hardware Association reconvened, President Tomlinson in the chair.

### Report of Committee to National Convention.

Mr. McGuire, as chairman of the committee to the National Association, which met in Chicago in March, made a verbal report. Mr. McGuire prefaced his remarks with some interesting stories which were greatly appreciated by the delegates. Mr. McGuire spoke at length upon the good accruing to the State Association through the sending of its delegates to meet with representatives of so many State associations. He recommended sending as a delegate to the coming gathering of the National Association Secretary Mathews as one who thoroughly understands the business end of association work, and who would gather much which would

be of interest to the business part of the Minnesota association. Mr. McGuire commented in glowing terms upon the reception tendered the National Association at Chicago, especially mentioning the many favors received at the hands of W. H. Bennett of the Reading Hardware Company and D. W. Simpson of the Wilcox Mfg. Company.

A paper upon the subject, "Shopkeeper vs. Merchant," was read by H. L. Chaffee of Mankato. This interesting paper was presented in our last issue.

Upon motion the convention adjourned until 2 p. m.

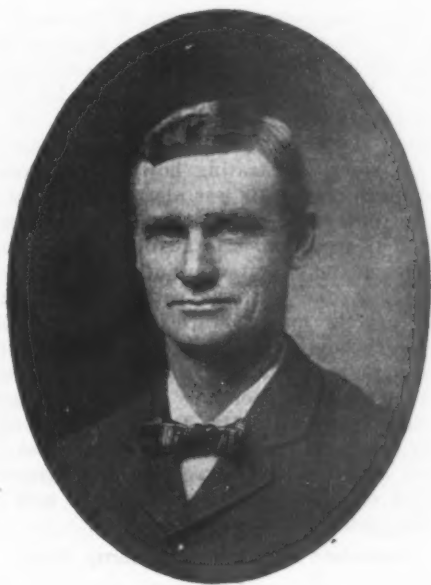
#### FRIDAY AFTERNOON SESSION.

Upon the reassembling of the convention in the afternoon President Tomlinson introduced S. R. Miles, president of the Iowa Retail Hardware Dealers' Association. Mr. Miles said in part:

##### S. R. Miles' Address.

I can assure you, gentlemen, that it affords me a great deal of pleasure to meet with the Minnesota Association. I have attempted to be with you at several previous meetings, but like most Hardware dealers, my time is fully employed, and I have not had that pleasure before.

The Iowa Association, in common with all other asso-



S. R. MILES.

ciations, has much to thank the Minnesota Association for. We feel, in fact we know, that your work has been more successful in every way than that of any other State association, and standing before you and looking into your faces, the fact of your success is largely explained to me. The meeting together of so representative a body of one of the principal commercial interests could not be otherwise than successful. I came to your association to-day not with any idea of talking to you, but of trying to absorb some of the good things from your association work. I did not get into your meeting this morning until something after 10 o'clock, but was very much interested in the report and the work of your insurance association. In fact, we feel in Iowa that that is one of the strongest features of the association work. We have, in common with all other associations, I think, had trouble in getting our members or our Hardware dealers to appreciate the benefits to be derived from an association of this kind, but we feel, as you people have felt, only longer ago—about three years—that the insurance feature would do more toward increasing our membership than any other one thing that we could do.

#### THE BENEFITS TO BE DERIVED FROM ASSOCIATION WORK

to the average dealer, particularly to the dealer who does not attend these meetings, is hard to explain. I think that all of us who have attended regularly the meetings of our Hardware associations feel that we have derived a great deal of benefit from this work of co-operation.

The Minnesota Association, I think, has perhaps been more fortunate in impressing upon the dealers the benefits of association work than any of the State associations. We in Iowa, while our work has been organized some five years, have not met with much success. We had at one time, due largely to the efforts of a lady secretary, a membership of nearly 500—almost as strong as the Minnesota Association. The members seemed to gradually lose interest, until at the present time we have a paid up membership list of something like 200.

The only way that we can accomplish anything along this line of association work, or, rather, the better way in which we can accomplish more good than any other, is by getting our membership up to the highest possible notch. You in Minnesota have a possible 1000 dealers, out of which 500 are members of your association, or about 50 per cent. In Iowa we have approximately 1700 dealers and a much smaller percentage of association members. We feel that the work we are doing now, based largely on the plan of the Minnesota—that is, in agitating the insurance feature—will result in more benefit to the association than any line we might have worked upon heretofore.

Mr. Miles further explained to his hearers that the Iowa Association had desired to affiliate with the Minnesota insurance organization, but found that the laws of Iowa were prohibitory. After a few further remarks concerning the work of the Iowa Association, and the desirability of holding up the hands of the officers of all similar organizations, Mr. Miles again thanked the association for the privilege of addressing them.

At this point a pleasant surprise was in store for the convention, some thoughtful members providing a bunch of carnations which were placed on the president's desk, each speaker to be provided with one of the flowers.

#### Association Work.

National Secretary M. L. Corey addressed the association in a semi-executive session. After a few preliminary remarks regarding the development of the State associations and the line of work they were following together with affiliation to the National Association, he called for a general symposium on various topics of interest to the trade, with the consent of the presiding officer. A general discussion followed, during which quite a number of subjects were taken up, including the relation of the jobber to the retailer, the various kinds of competition indulged, profits, general education of both hardwaremen and customers, the desirability of always keeping in mind the cost of goods, how and when to buy as well as to sell, local associations, arrangements by which help may be extended to the smaller dealer in the small towns, the advisability of a general and uniform price list with the assistance of trade papers, the everlasting question of catalogue store and department supply houses, the cutting of prices and destructive competition, whether it is advisable to carry cheap goods and to meet racket store competition, &c.

One member explained to the association why he had not joined the organization and his reasons were regarded as valid but his reasons for changing his mind and joining the association were regarded as of special significance. This dealer laid special stress upon the necessity of having good clerks.

Considerable stress was laid upon local associations and remarks both *pro* and *con* were pertinent.

#### Relation of the Jobber to the Retailer.

B. W. How of Duluth read the following paper upon "The Relation of the Jobber to the Retailer," which was well received by the members.

For me to pose as an authority on the jobbing business would be absurd. When we want a talk of that kind, if we pick from the Twin Cities we would be able to find many that would do it ably, and if we chose the speaker from the city "Where Rails and Waters Meet," there would be at least one.

No doubt in their several talks they would get so interested that they would mention the good qualities of the "Gilt Edge Brand," "The Diamond," "Crown," "Minnesota Chief" or the "Zenith," but their refer-



## Minnesota Retail Hardware Association.

ence to the above could be put in three words: "Sell good goods."

But you have chosen me as one of the speakers and I presume it was for the simple reason that you wanted a talk from a beginner. But while a beginner in one sense, I think I have been in it for 16 years so far as principles are concerned, for what holds good in retailing and will win out holds good in wholesaling. Be honest with your customers; give them good goods; value received for their money, and there will be no friction and no question as to the results.

### WORK IN HARMONY.

There is no need of a long talk on the relation of the jobber to the retailer, as we have had papers each year that took up this subject fully. The jobber has been told of the important position he fills in the distribution of goods, what the retailers expected of him, and with hardly an exception they have worked in harmony with the suggestions of this association and have helped build it up, as there are many dealers that are members of this association—yes, fully 50 per cent.—that are with us at the suggestion of the friendly jobber or one of their salesmen.

We admit the advantage it is to the retailer to have



H. HAUSER.

the jobbers' stock to draw from, and if it were not for these stocks fully 75 per cent. of the Hardware dealers in the State of Minnesota would have to go out of business, and then we would see the catalogue and mail order houses get the trade which is yours and which you are able to control with the co-operation of the jobber.

In putting this so strongly, do not think for one second that I have forgotten the importance the retailer is to the jobber; for you, as well as he, know that without the retailer's support he would have to go out of business or at least change the manner of conducting it.

It is all summed up in this: Let the retailer treat the jobber just as he would have his customers treat him, and let the jobber treat the retailer just as fairly and honestly as the greater majority. I am proud to say, of the retail Hardware dealers do their customers, and you have the true relation that should exist between the retailer and jobber.

### ACCOMPLISHMENT OF ASSOCIATION.

I would impress this on the mind of every dealer in Hardware—it makes no difference if we sell goods by the piece over the counter or by the dozen or case from a warehouse—I think the Minnesota Retail Hardware Association has done more in the seven years of its existence to bring the Hardware business up to the high standing that it has to-day, and to bring about the

friendly feeling between the retailer and jobber, than any other one thing. And ours and the work of other associations would not have accomplished the good they have had it not been for the loyal support of the Hardware trade papers and co-operation of the jobbers and loyal manufacturers.

Do not let us forget that our interests are identical, and when we find a dealer that is not with us let us try to get him in accord with the association, for it is by hearty co-operation of all that we can hope for the full measure of success that our organization deserves.

### The Retailer as an Educator.

President Tomlinson announced that because of the illness of the Hon. E. H. Dearth he was unable to be present. He then called upon C. D. Decker to speak to the convention upon the subject of "The Retailer as an Educator."

Mr. Decker had not reduced his thoughts to paper, but spoke from a few meager notes, prefacing his allusion to the educational feature by a story in which Mark Twain and Chauncey Depew were the heroes, the moral being, throw the responsibility for what you do or say upon some one else. As an illustration of the advantage of extemporaneous speaking, Mr. Decker had recourse to an interesting story about ministers, over whom the devil seemed to exercise censorship, the point being that if a man did not commit his thoughts to paper the devil himself could not tell what would be said; hence, the advantage. Mr. Decker then elaborated his theory of educating the farmer and other customers, as well as the clerks of the Hardware dealers. He again had recourse to a story, illustrating how an observant clerk advanced quickly over his less alert brother. Mr. Decker's theory concerning advertising seemed to be rather academic than practical. He advocated the dealer giving a history of the manufacture of a Stove for instance, beginning with the ore, the coke and the limestone which go into the manufacture of pig iron, and so on through the various stages of the production of the manufactured article, in an advertisement. It seemed evident that practical experience had not dictated this method of advertising. Mr. Decker's ideas upon the quality of goods to be sold, however, seemed to meet with more approval, he advocating the carrying of a high quality of goods and the pressing the sale of such, if need be, upon wise customers.

### Garnishee and Trading Stamp Bills.

P. G. Hansen, ex-president of the Retail Grocers and Retail Merchants' Association, upon invitation of President Tomlinson, addressed the convention upon the Garnishee and Trading Stamp bills now before the State Legislature, suggesting that the convention, if they could consistently do so, indorse the action taken by the Grocers' Association, and lend their active aid toward the securing of the passage of the bills. Mr. Hansen explained that the Garnishee, or Hinton bill, allows the attachment of wages for debts over and above \$8 per week. Heretofore monthly salaries of \$25 have been exempt from garnishee. The Trading Stamp bill, known as Senate bill 135, prohibits the gift system under a penalty of a fine of \$1000, or imprisonment from one to six months, or both, according to the discretion of the court. Mr. Hansen explained that of all the trading stamps issued, it had been determined that only about 20 per cent. of them had been cashed, giving a tremendous profit to the stamp companies. The trading stamp company, however, claimed that 45 per cent. had been redeemed, but even so, 55 per cent. of the stamp sales had never been returned.

Upon motion the convention adjourned until 9 a.m. Saturday.

### SATURDAY MORNING SESSION.

Upon the assembling of the convention on Saturday morning, President Tomlinson announced the following as a committee to superintend the drawing and awarding of the Range, which had been offered as a prize by W. H. Gruenberger of the Northwestern Furniture Exposition at St. Anthony Park; Messrs. Amle of Benson, Cowling of Alexandria and Keifer of Barnesville. Later

the committee announced that Geo. A. Settergren of Settergren Bros., Litchfield, had been the successful contestant. President Tomlinson, however, warned Mr. Settergren that it would be necessary to present the members with cigars before he could receive the Range, that the members might burn incense upon the altar of the donor; the incense was furnished by Mr. Settergren.

#### Mail Inquiries.

Three letters were read from Massachusetts, New Mexico and West Virginia, asking if the insurance department would consider the writing of policies outside of the State of Minnesota, having seen references to the matter in *The Iron Age*. The letters were referred to the Insurance Committee.

#### Famine Fund.

Upon request of one of the members, Mr. Roberts of Minneapolis announced to the convention that action had been taken by the local organization expressing sympathy and extending aid to the sufferers from famine in Sweden, and he thought it was a matter which should be taken in hand by the State Association.

Following Mr. Roberts' remarks a motion was made appropriating \$50 to the famine fund for the sufferers in Sweden, which was carried unanimously.

#### Remarks by Jobbers and Manufacturers.

Mr. Mason, secretary of the State Retail Grocers' and Merchants' Association, upon request of President Tomlinson, addressed the convention upon the advantages to be derived from association work, not only through the coming together of kindred lines, but including merchants in various lines of business. He especially referred to the securing of proper legislation of advantage to commercial interests. In answer to an inquiry as to the method pursued in getting other than Hardware merchants into the local Hardware organization, he spoke of an instance where a membership fee of \$2 a month was required, and the merchants were taken in as associate members, with the understanding that they were to assist in matters of legislation which should come up.

Mr. Mason requested that a committee of three be appointed to accompany him on Monday to the State Capitol to assist in the passage of the trading stamp measure. The committee nominated by President Tomlinson was as follows: Messrs. McGuire, Roberts and Stremel.

Wm. H. Kirk of Minneapolis, upon invitation, addressed the association upon the advantages of association work, especially referring to co-operation through organization. He called attention to work along this line as of an educational nature, and spoke especially in regard to the steadiness of prices which results therefrom. He gave a few points on how to advertise, including the display of goods in the store. He dwelt upon the benefits to be derived by all dealers from the keeping abreast of the times by putting in side lines and being on the alert to know what goods are in vogue.

Mr. Hill of Janney, Sample, Hill & Co., Minneapolis, upon invitation, welcomed the delegates to Minneapolis and expressed approval of the social features which resulted from the assembling of the members, which features contribute largely to a better understanding among jobbers and dealers, proving of mutual advantage.

Messrs. Ladner and Mason, as a result of some inquiries, gave some instances where trading stamps proved detrimental to the dealer's business.

Mr. Ladner explained to the association wherein the Hardware dealers in his section had organized to induce a discontinuance of the trading stamp system by establishing an opposition company, through the workings of which the original stamp company agreed to discontinue business upon the expiration of their contract.

#### The Retailers' Advertising.

W. E. Davis of the *Hardware Trade* of Minneapolis presented the following paper on "Retailers' Advertising:"

In a passably good weekly newspaper published at Staples, Minn., appears every week in the year the well

written advertisement of a small but enterprising dealer. At the bottom of this advertisement in large type appear the words: "Staples is the best place to trade in this part of the State." This is the text on which this advertisement is based.

Worlds of words have been written on methods in advertising, but those authorities who seek to give the Hardware retailer light on short cuts to publicity have had comparatively little to say about mediums. It is the mediums at the command of the dealer in the smaller towns which this paper will discuss, and more especially what is referred to in newspaperdom as the country weekly.

This convention undoubtedly has a reasonably large attendance from the larger cities. Nearly all big trade movements radiate from the larger centers, and this has been especially true of association work in most lines. In framing his advertising policy the Hardware dealer in the larger cities of the State has a much different problem to solve than the dealer in the small town. It may be easier in some respects. It may be more difficult in others. What is called the "down town" Hardware dealer in a city the size of Minneapolis, St. Paul or Duluth, has the big newspapers at his command. Their circulation is pushed to the limit in every direction. He need not study long about mediums. He may be inclined to scratch his head and wrinkle his countenance when he figures on the big rate, but if advertising is to pay him at all, undoubtedly his best results are to be derived from the big papers. I see that one of the large retail dealers of Minneapolis, in a recent interview, says the newspapers are about the only medium he uses.

But the great majority of the men attending this convention and the large number of the members of this association come from the smaller cities and towns. There is still another problem, and it is to these men I address these remarks.

#### A TYPE OF COUNTRY EDITOR.

Referring back to the sentence taken from the Staples newspaper, I will say that in using the principal medium at their command, the country weekly, there is not enough united action by merchants toward bringing trade to the town. There is too much of a disposition to fight for that already coming instead of a united effort to reach out for new business, in which endeavor the local newspaper and the editor can be used to good effect.

Editors of country weeklies who push the circulation of their papers to the limit are comparatively few. The country editor is a man of many duties, and if he falls short in some of them he is not to be severely blamed. But he should look after his circulation, and in this important particular many of them fail. There are too many country newspapers which circulate entirely in the country naturally tributary to their town, and which do not reach out for readers in those communities the trade of which several towns are seeking, and where a good circulation would be of great benefit to their advertisers. What can the Hardware dealer do toward improving these mediums?

No matter how small the town, somewhere it comes in competition with other towns for the trade of certain communities. All other things being equal, the town which has the most widely circulating newspaper will get the best of this trade. Personal acquaintance may stem the tide for a time, but ultimately bright advertisements in a good newspaper will have their effect. Every Hardware dealer should see that his local paper obtains as many readers as possible in this contested territory.

Take a look at the work of a certain type of editors and you will understand why this part of the weekly newspaper is too frequently neglected. Many of them are men with no practical business ideas. They have learned the printing trade some time or other, and in some way obtained a start in business. They can write some, can run the press and set the type, can solicit ads. to some extent, turn out job work, and talk politics. But to really systematize their business as you do your mercantile business never seems to occur to them. Although they know that advertisements to be profit-



## Minnesota Retail Hardware Association.

able must have circulation, they go on year after year waiting for the country to increase in population instead of competing for circulation in new territory. They announce in the columns of their paper occasionally that for a certain period new subscribers will be taken at a cut rate. They talk to the farmers occasionally on market days, and that ends the efforts of the circulation department.

### CO-OPERATIVE WORK.

With the growth of associations, both in the Hardware and the general trade, merchants are learning more and more the benefits of co-operation. This gathering and the work of this association teach a splendid lesson along this line. This spirit of co-operation can be carried into the affairs of the smallest town in the Northwest and it can be used to increase the value of the local paper as an advertising medium. One merchant in Staples is doing good in advertising his town as a superior place to trade. Consider what all the merchants could do along the same line co-operating with the newspapers of the town.

The editor wants and needs the merchant's support. What can he give for it? He points to the good a paper can do the town in a general way. He says something about public spirit. It is well to contribute liberally to the public spirit fund, but the merchant should not be expected to go beyond reasonable limits in this particular. The merchants of any town will find a live weekly paper a good ally in securing trade and in fighting trade battles with other towns. But the editor in the majority of cases must be checked up closely by the merchant if this alliance is to continue profitable. If he is not pushing his circulation into the enemy's country and keeping everlastingly at it, he is not worthy the support of the merchants of his town. The merchant should take the trouble to ascertain just where the paper circulates.

### A PRACTICAL ILLUSTRATION.

Take a practical illustration. A Hardware merchant who can write a good practical advertisement, and looks after the details of his advertising carefully, is anxious to attract more trade from a certain district. The residents may be people of one nationality. They may be consumers of particular lines of goods. He uses the weekly paper and he perhaps distributes some circulars. After following his advertising campaign for some time he finds that he receives some responses from people living in the district from which his town naturally draws its trade. These probably come through the newspaper advertisement. But in the community he especially desires to interest he finds that the replies come principally from people who read the circular. Right here is where he is likely to lay down the general rule that the circular is a better medium than the newspaper.

But nine times out of ten this is not because the people in that community do not read the newspapers. They are not reading the particular newspaper in which he advertises. Here is where the merchant and the editor should get together. The editor should be given to understand that if he gets the merchant's business in preference to circulars and other mediums he must make his medium more valuable. He must secure a live correspondent in that locality and publish news which will directly interest its people and draw their attention toward that particular town. When they come to town they should be given mention. The newspaper should do all it can to prove to that community that the town is interested in its people and wants their favor and their business. Following this, systematic and energetic work will increase the subscription list in that locality and the local merchant is that much better armed in his fight for business, against neighboring towns.

### ADVERTISING AS AN INVESTMENT.

Take advertising as an investment. It is that ahead of all else. Does the merchant investigate the merits of this investment thoroughly? He expends so much money to accomplish a certain result. But nine times

out of ten he does not know whether his advertising vehicle rolls far enough into the surrounding country to accomplish the work. The country editor should tell the merchant just how many papers he is sending into certain communities or districts. If he has not the circulation he is not entitled to the advertising. A merchant who buys advertising space in the local paper to attract the trade of these communities is playing an advertising blind man's bluff game if he does not acquaint himself with the circulation of the medium on which he is spending his money. Competition between trading points will grow keener as the country grows older. Towns whose merchants form a get-together club and plan to increase the total volume of business will have an advantage over those towns which do not have that spirit of co-operation. Every merchant in the town stands to benefit from every new customer brought there. This kind of a trade campaign is much better for all concerned than one which simply seeks to divide the trade, only in different proportions, which has been coming there for years. I believe that if the merchants of a town will take the right kind of interest in the local paper and be firm and reasonable in their demands they can convert the local editor into a most valuable ally. The growth of trade associations is bringing the local merchants' association into prominence. The local merchants' association organized for the general good of a town can handle such problems as these to advantage. While circulars are all right in their way I do not believe they are to be compared as a medium to a good newspaper. It is only when the newspaper fails to perform its mission properly that the circular need be used. It is true that there are many towns in which the circular is more effective than the newspaper, but a look at the newspaper explains why. The merchants of the town can correct this and practically force the editor to improve his medium.

The character of retail advertising and the judgment used is improving in the Northwest each year. This is partly due to competition. But it is also true that Northwestern retailers though practical education are constantly developing better methods. As it is, we compare very favorably with any other section of the country.

### Report of the Committee on Resolutions.

The following resolutions were reported by the committee and were unanimously adopted:

*Be it Resolved*, That the thanks of the Minnesota Retail Hardware Association be and are hereby extended to M. L. Corey, secretary of the National Association, for his attendance at the sessions of our association and for his words of encouragement and advice; and we hereby extend to him our best wishes for his success in his work, and express the hope that we may have the pleasure of meeting him again in 1904.

*Be it Resolved*, That we hereby extend to the Northwestern Furniture Exposition our sincere thanks for the courtesies extended to the members of this association in giving them the opportunity of studying every method of doing business through organization, as well as for the bountiful lunch so elegantly served.

*Be it Resolved*, That the Minnesota Retail Hardware Association hereby fully indorse and heartily approve of the following measures now before the State Legislature, viz.:

S. F. 135, known as the Stamp bill, and H. F. 215, known as the Garnishment bill, and pledge ourselves to co-operate with the Grocers' Association in their endeavor to secure the passage of their measures.

*Be it Resolved*, That local co-operation throughout the State, which has been discussed and emphasized in this convention, be indorsed and recommended to each individual member here present to carry home with him and to be under the plan carried out when possible in his own town.

Upon motion a vote of thanks was extended to Mr. Mason for his presence and interesting and instructive talk to the convention.

### To Meet at St. Paul.

President Ladner of the Minnesota Fire Insurance Company suggested that each member upon his return home indorse the Trading Stamp bill now before the legislature, urging his Representative and Senator to secure the passage of the bill.

President Tomlinson embodied the suggestion of Mr.

Ladner into a motion, which was unanimously carried.

President Tomlinson announced that the Chamber of Commerce of St. Paul requested that the next annual meeting of the association be held in St. Paul. Upon motion the invitation was accepted.

Upon motion the convention adjourned to meet at St. Paul in 1904.

#### Meeting of the Executive Committee.

A meeting of the Executive Committee was held at 3 p. m. Saturday afternoon, the committee organizing by electing A. Barto of Long Prairie treasurer and M. S. Mathews of Minneapolis secretary.

President W. H. Tomlinson, Vice-President H. S. Cleveland, President Chas. F. Ladner of the insurance company, O. F. Stebbins of Rochester, and Secretary M. S. Mathews of Minneapolis were selected as delegates to the national convention, which will meet in Chicago March 16 to 18, inclusive.

The Executive Committee of the association, with the changes made at the recent meeting, is now composed of the following: W. H. Tomlinson, Le Sueur; H. S. Cleveland, Minneapolis; F. E. Hunt, Red Lake Falls; A. T. Stebbins, Rochester; Benj. F. Kernkamp, St. Paul; C. H. Casey, Jordan; C. H. Hornberg, New Ulm; W. T. Cowing, Alexandria; Chas. F. Ladner, St. Cloud; J. F. McGuire, St. Paul; Julius Schmidt, Wabasha.

The Executive Committee of the insurance department of the association is as follows: C. H. Casey, Jordan; W. T. Cowing, Alexandria; E. H. Hornberg, New Ulm; A. C. Hatch, Battle Lake; H. Hauser, Minneapolis; A. T. Stebbins, Rochester; Chas. F. Ladner, St. Cloud; F. W. Lucas, W. H. Tomlinson, Le Sueur; E. H. Loyhed, Faribault; J. F. McGuire, St. Paul. The new officers will not be elected until the May meeting of the board.

#### Members in Attendance.

Aug. O. Lysen, Lowry.  
M. J. Solum, Hitterdal.  
George Parrott, Owatonna.  
G. Zimmerman, Mankato.  
C. F. Stremel, Minneapolis.  
C. H. Homberry.  
C. L. Perkin, Goodhue.  
T. W. Lally, Goodhue.  
Edw. Guenhager, Merriam Park.  
Frank E. Hunt, Red Lake Falls.  
J. R. S. Cosgrove, Le Sueur.  
J. Borgerding, Melrose.  
John J. Kraker, Melrose.  
G. Friedrich & Co., Jasper.  
Ben Clayton, St. Croix Falls.  
Albert L. Johnson, Hastings.  
W. H. Vollbricht, Hanover.  
H. H. McCray, W. D. Marvin.  
Pine Island.  
Cain Bros., West Concord.  
Moorhead Hardware Co., H. L. Babst, Moorhead.  
Julius Schmidt, Wabasha.  
W. T. Cowing, Alexandria.  
E. A. Pease, Redwood Falls.  
Geo. F. Duerr, Plainview.  
H. M. Griffin, Marietta.  
Lewis C. Cosgrove, Le Sueur.  
Henry R. Schroeder, Schroeder Bros., St. Paul.  
B. W. How, Duluth.  
A. C. Mathes, Morton.  
C. A. Newgard, A. Newgard & Son, New Richland.  
O. B. Nelson, Nelson & Tone, Spring Grove.  
S. W. Rankin, Minneapolis.  
O. M. Holuth, Fergus Falls.  
P. H. Kiefer, Bainesville.  
John Hoerneman, Young America.  
Frank Wortsel, Waconia.  
B. S. Nanasek, New Prairie Hardware Co., New Prairie.  
A. G. Sashes, New Prague.  
W. B. Gislason, Minnetonka.  
L. J. Larson, Winthrop.  
Hamesen Bros., Shelby.  
H. C. Estly, Cynn.  
E. L. Bratsch, Renville.  
A. T. Stebbins, Rochester.  
Wilson Bros., McIntosh.  
H. M. Webster, Ulen.  
C. M. Bouck, Royalton.  
W. S. Davis, Stewartville.  
C. W. Parsons, Franklin.  
Dunten & Rackdiff, Amandale.  
Palmlund & Erickson, Olivia.  
Gemerson & Son, Kenyon.  
H. W. Addison, R. M. Addison & Son, Marshall.  
E. H. Helms, Renville.  
J. T. Olson, Brandon.  
Songall Bros., Mayer.  
S. A. Nylander, Battle Lake.  
C. W. Helms, Olivia.  
A. C. Osborn, Evelyn.  
M. F. Dressler, Minneapolis.  
H. A. Bouck, Foley.

Wm. Simms, Minneapolis.  
A. C. Hatch, Battle Lake.  
S. A. Mylander, Battle Lake.  
T. A. Ranstad, Battle Lake.  
K. Hansen, Battle Lake.  
Mrs. T. A. Ranstad, Battle Lake.  
O. C. Bergan, Hayfield.  
Albert Ranstad, Battle Lake.  
H. S. Vincent, Fort Dodge, Iowa.  
Emil Gensmer, Caledonia.  
H. Hauser, Minneapolis.  
Geo. O. Burnhall, Minneapolis.  
Wm. Werner, Winsted, Minn.  
Anthony Poss, Franklin.  
L. P. Poppenhagen, McIntosh.  
H. H. Heydon, Chatfield.  
J. P. Watson, Marshall.  
L. S. Johnson, Fosston.  
Peter O. Roe, Sacred Heart.  
N. S. Taarned, Tracy.  
T. A. Revord, Austin.  
A. Puck, Slayton.  
M. G. Peters, Mantorville.  
T. K. Dahle, Brownesdale.  
C. J. Stark, Ortonville.  
Gust. Hansing, De Pue Bros. Co., Duluth.  
J. O. Peterson, Canby.  
H. S. Cleveland, Minneapolis.  
E. O. McGaffey & Co., Buffalo.  
J. S. Crocker, Minneapolis.  
G. A. Rieke, Fairfax.  
Robert Tester, Gibbon.  
H. A. Bauck, Foley.  
C. W. Mason, Mason Bros., St. Peter.  
G. A. Settergren, Settergren Bros., Litchfield.  
S. N. Gayner, Dassel, Gayner & Co.  
B. Klein, Foley.  
Wm. Strehlow, Morheech.  
Peter S. Prink, Cannon Falls.  
Geo. Stullenberg, St. Paul.  
Fred. Brack, St. Paul.  
C. Lucas, Menominee, Wis.  
H. H. Onsted, Dawson.  
J. O. Jenkins, Maple Lake.  
F. A. Pullen, Park Rapids.  
C. H. Casey, Jordan.  
J. G. Slater, Carroll.  
E. H. Woehler, Woehler Bros., Minneapolis.  
F. H. Kimpel, Gaylord.  
H. L. Wanke, Gaylord.  
J. J. Gauldberg, Cambridge.  
L. L. Philley, Louisville.  
Nels A. Rudning, Bellingham.  
S. B. McIntyre, Minneapolis.  
A. Lindehohe, Belgrade.  
Selpp Bros., Brainerd.  
Emil Gensmer, Caledonia.  
C. H. Larsen, Nelson.  
R. S. McGraft, Washburn.  
O. L. Schultz, Minneapolis.  
G. A. Lewis, Mankato.  
J. F. McGuire, St. Paul.  
Frank H. Wade, Wieland & Wade, Duluth.  
John Schleck, Schleck & Co., North St. Paul.  
J. E. O'Brien, Crookston.  
L. H. Hauer, Lake Benton.

#### Other Visitors.

Wm. H. Kirk, the Art Stove Company, Minneapolis.  
W. H. Gruenhagen, Eclipse Stove Company, St. Paul.  
O. E. Mathison, Louder Machinery Company, Minneapolis.  
Chas. S. Bradt, Fairbanks, Morse & Co., St. Paul.  
J. W. Torrence, the Wm. Resor & Co., Minneapolis.  
H. W. Loomis, St. Paul.  
E. T. Lindman, Farwell, Ozmun, Kirk & Co., St. Paul.  
L. W. De Vault, the Western Supply Company, St. Paul.  
O. R. Manners, the Western Supply Company, St. Paul.  
L. H. Filiatrault, Stearns Paint Mfg. Company, St. Paul.  
J. F. Niemayer, Stearns Paint Mfg. Company, St. Paul.  
H. B. Mee, Stearns Paint Mfg. Company, St. Paul.  
P. W. Lyon, Janney, Sample, Hill & Co., Minneapolis.  
W. H. Davis, Minneapolis.  
C. H. Cook, Cribben & Sexton Company, Chicago.  
Sam T. Moles, Minneapolis.  
C. A. Proctor, W. S. Nott Company, Minneapolis.  
W. M. Burns, Pittsburgh Plate Glass Company, Minneapolis.  
Chas. E. Bell, Hackett, Walther, Gates Hardware Company, St. Paul.  
Chas. A. Lindner, The Hardware Trade, Minneapolis.  
A. D. M. Gilvira, Rochester Stamping Company, Rochester, N. Y.  
H. L. Anderson, Rochester Stamping Company, Rochester, N. Y.  
T. R. Kyle, Kelley-How-Thompson Company, Duluth.  
John R. Adams, the Excelsior Steel Furnace Company, Chicago.  
Fred. A. Clarke, Minneapolis.  
W. T. Partridge, The Iron Age, Chicago.  
W. H. Greenleaf, Litchfield.  
A. Vogel, Brand Stove Company, Milwaukee.  
F. B. Garoutte, Mankato.  
V. D. Ellingson, Chicago.  
C. H. Have, Duluth.  
M. A. Heegaard, Watertown, S. D.  
T. J. Brink, Foss-Armstrong Hardware Company, Ellsworth.  
T. J. Duffy, Jr., Germer Stove Company, Chicago.  
W. S. Wood, Marshall Hardware Company, Minneapolis.  
Geo. Ayre, Duluth.  
J. C. Nolting, St. Paul.  
G. A. Dalmann, Minnetonka.  
W. W. Strayer, Rathbone, Sard & Co., Aurora, Ill.  
H. L. Chaffee, Norvell-Shapleigh Hardware Company, St. Louis.  
T. L. Hopkins, Norvell-Shapleigh Hardware Company, St. Louis.  
E. T. Jones, Minnesota Linseed Oil Paint Company, Minneapolis.  
O. P. Lambert, Minnesota Linseed Oil Paint Company, Minneapolis.  
J. H. Hall, Minnesota Linseed Oil Paint Company, Minneapolis.  
S. B. McIntire, American Desk Company, Minneapolis.  
L. W. Nesbitt, F. & L. Kahn Bros., Hamilton, Ohio.  
Chas. H. Connor, Fuller-Warren Company, Milwaukee, Wis.  
T. M. Gilliland, Geo. M. Clark Company, Chicago.



## Minnesota Retail Hardware Association.

Annis B. Porter, E. Z. Mfg. Company, Galesburg, Ill.  
 Walter E. Voigt, Berger Mfg. Company, Chicago.  
 J. M. Mobley, Ney Mfg. Company, Canton, Ohio.  
 H. S. Nunawaker, Ney Mfg. Company, Canton, Ohio.  
 Chas. Lindemann, J. P. Lindemann & Sons, Milwaukee.  
 C. L. Rankin, J. P. Lindemann & Sons, Milwaukee.  
 Wm. Curtis Sibley, Malleable Steel Range Company, Beaver Dam, Wis.  
 G. L. Nye, Minnesota Stove Company, Shakopee, Minn.  
 E. A. Campbell, Minnesota Stove Company, Shakopee, Minn.  
 Davis Meiss, Minnesota Stove Company, Shakopee, Minn.  
 W. H. Bennett, Reading Hardware Company, Chicago.  
 R. B. Nixon, E. C. Atkins & Co., Indianapolis, Ind.  
 W. P. Hartman, E. C. Atkins & Co., Indianapolis.  
 C. M. Kennedy, Wheeling Corrugating Company, Chicago.  
 W. A. Armstrong, C. G. Baumann, C. E. Brubaker, N. S. Dale, C. L. Devendorf, H. W. Loomis, J. P. McLaren, E. E. Hiam, N. Gelb, H. P. Gailup, H. C. Goltz, Farwell-Ozmun-Kirk & Co., St. Paul.  
 Sidney P. Johnson, American Artisan, Chicago.  
 Chas. E. Bock, Milwaukee Corrugating Company, Milwaukee.  
 H. O. Amundson, Riverside Hardware Cabinets, Alexandria, Minn.  
 B. W. How, Kelley-How-Thompson Company, Duluth.  
 Wm. C. Caye, Wilcox Mfg. Company, Aurora, Ill.  
 H. L. Banks, Cole Mfg. Company, Chicago.  
 Sam T. White, White Lily Washer Company, Davenport, Iowa.  
 D. L. Myers, Watertown Thermometer Company, Watertown, N. Y.  
 A. R. Fuller, Hunt, Helm, Ferris & Co., Harvard, Ill.  
 C. B. Waterman, Germer Stove Company, Erie, Pa.  
 Wm. Petersen, Lyons Specialty Company, Lyons, Iowa.  
 T. L. Campbell, Brand Stove Company, Milwaukee.  
 L. P. Kelsey, the Art Stove Company, Detroit.  
 H. L. Mosher, Estate of P. D. Beckwith, Dowagiac, Mich.  
 Geo. T. Adams, Estate of P. D. Beckwith, Dowagiac, Mich.  
 H. O. Spencer, Richards Mfg. Company, Aurora, Ill.  
 W. H. Voss, Voss Bros. Mfg. Company, Davenport, Iowa.  
 Chas. Mearns, Voss Bros. Mfg. Company, Davenport, Iowa.  
 H. K. Tompkins, E. A. Burke, J. C. Vincent, E. W. Eisenhart, R. J. Olin, G. F. Sexauer, C. F. Chandier, L. T. Siddall, G. T. Scott, W. J. Moorhead, O. P. Shephardson, H. B. Essington, G. W. Miller, C. C. Clement, J. A. Hasty, R. C. David, Hibbard, Spencer, Bartlett & Co., Chicago.  
 W. E. Davis, The Hardware Trade, Minneapolis.  
 C. S. Howard, Buck's Stove & Range Company, Minneapolis.  
 J. F. Segloh, Duluth.  
 H. H. Wilson, Duluth.  
 R. S. Clarke, Royalton, Minn.  
 M. Ledwidge, Follansbee Bros., Pittsburgh.  
 W. B. Sacher, Minneapolis.  
 C. L. Featherstone, Joliet Stove Works, Joliet, Ill.  
 Geo. Temple, Quincy Stove Mfg. Company, Quincy, Ill.  
 W. Sibley, Malleable Steel Range Company, South Bend, Ind.  
 S. C. Silverman, St. Paul Stove Repair Works, St. Paul.

### CONVENTION NOTES.

A little star twinkling in the zenith of a blue sky above a crescent moon was the design of a button widely distributed by the Marshall-Wells Hardware Company of Duluth, "Zenith" being the trade-mark of the company. The February issue of the monthly magazine issued by the firm, which is also called the *Zenith*, was presented to the delegates attending the convention.

Hibbard, Spencer, Bartlett & Co., Chicago, were represented by a host of good men under the command of C. W. Miller, who distributed a neatly bound memorandum book containing illustrations of the new building of the company at Chicago, which will be occupied about April 1.

The Minnesota Linseed Oil Paint Company of Minneapolis, desiring that the delegates should see themselves as others see them, distributed a pocket mirror as a souvenir.

The Brand Stove Company of Milwaukee presented a gilt edged memorandum book, bound in red, the cover impressed with a burning globe. The book met the warm approval of the delegates.

A cute vest pocket edition thermometer was the souvenir of the Watertown Thermometer Company, represented by D. L. Myers of Watertown, N. Y.

Farwell, Ozmun, Kirk & Co., St. Paul, were represented by a veritable army, their assiduity in work being evident in the wide distribution of souvenir aluminum card trays, the bottom of which was impressed with a good point on Paints. The blotters of the company were also favorites, bearing the illustration of the Range of that name.

"Consider the lilies how they grow," not the lilies of the field, but the Lily Washers. They are the machines that make white—Sam T. White—clothes. The appropriate souvenir was a white lily; perfect, even to the

fragrance of the real thing, and the convention was a fair field.

E. P. Waterman and T. B. Duffy, Jr., representing the Germer Stove Company, were at home, with a radiant smile and Metal Cooks, to the delegates.

This is the house that Atkins built, with the assistance of R. B. Nixon and W. P. Hartman, at the Twin City. A very novel idea; the foundation was laid upon teeth, not dragon's teeth of mythological renown, but saw teeth, susceptible of logical demonstration, and like the Sierra Nevadas, widely known. A souvenir pocket-book of alligator leather containing a memorandum pad, was distributed, carrying information about Saw Teeth to the association members.

The silver Acorn stick pin distributed by W. W. Strayer, representing Rathbone, Sard & Co., of Aurora, Ill., was much in demand. The headquarters of Mr. Strayer were effectively decorated and flooded with soft Orient light.

H. O. Spencer, treasurer of the Richards Mfg. Company, Aurora, Ill., explained the merits of his trolley system to all comers. There were wheels in abundance and they all went. Mr. Spencer makes them go. There was a souvenir pocket book for all applicants, too.

The Stearns Paint Mfg. Company, St. Paul, presented the merits of their production through the medium of a pocket diary, fortified by a calendar and valuable statistical information.

The Reading Hardware Company had no display; but that was not necessary, the name "Bennett"—W. H. Bennett—being a synonym for Hardware, and was seen and heard everywhere. Mr. Bennett was in possession of the keys to all the gates of the city.

Samples of artistic Metal Ceilings were artistically displayed by Chas. E. Bock, representing the Milwaukee Corrugating Company of Milwaukee.

Mouse Traps proving too E. Z. for Annis B. Porter, she has added a side line of Cut Offs made by the Young Mfg. Company of Bellevue, Ill. Proper conductors for water and trade.

Wm. C. Caye, representing the Wilcox Mfg. Company of Aurora, Ill., made an effective display of the well known Wilcox specialties.

The Dowagiac souvenir spoon and match box served as a center of attraction for the association members. H. L. Mosher and Chas. T. Adams were the charming hosts of all that called, welcoming the coming and speeding the parting guest.

The interests of the Berger Mfg. Company of Canton, Ohio, were safeguarded and further extended through the judicious efforts of their representative, Walter E. Voigt of Chicago.

A handsome 1903 calendar issued by the Commercial Club of Minneapolis was presented to the members of the association. The calendar is highly artistic and illustrates many of the principal points of interest in the city of Minneapolis, including a view of Minnehaha Falls in one of the public parks.

Among the social features of the convention worthy of special note were the social function at the Commercial Club, the theater party at the Lyceum and the meeting of the Knights of the Round Table at the Nicollet Hotel.

At the Lyceum Theater the Hardwaremen were recognized and made known to fame through the efforts of the players.

At the Commercial Club the feature of the evening was the singing of the Boys' Choir of St. Mark's Church. Thos. McCracken, Arndt Lillingren and Wm. Hanscome were the soloists. The voices of the boys were remarkably sweet and thoroughly appreciated by the association members, who availed themselves of the rare opportunity for a most enjoyable evening.

The Knights of the Round Table met at the Nicollet Hotel, where plenty of inspiration was furnished by the management. Toasts were numerous and responses were brief and witty. There were ten knights in attendance; ten heads with a single thought, ten hearts that beat as one. During the evening the knights went into executive session as the Ancient Order of Red Men, and initiated President S. R. Miles and Bishop Vincent of Iowa into full membership among the Indians, each candidate having a feather in his cap upon their recent election to the presidency and secretaryship, respectively, of the Iowa Association. W. H. Bennett was chief and Walter E. Voigt medicine man of the tribe. The Indians enrolled were Chas. E. Bock, Chris. Lindemann, Walter E. Voigt, H. L. Mosher, Geo. T. Adams, W. H. Bennett, H. S. Vincent, S. R. Miles and H. O. Spencer.

### THE CONSOLIDATED HEAVY HARDWARE, IRON AND STEEL LEAGUE.

THE Consolidated Heavy Hardware, Iron and Steel League held its annual meeting on Thursday, February 26, at 104 Reade street, New York. The delegates present representing their respective associations were as follows:

THE NEW ENGLAND IRON AND HARDWARE ASSOCIATION: E. P. Sanderson of the E. P. Sanderson Company, Boston; Frederick Butts of Butts & Ordway, Boston.

THE WESTERN NEW ENGLAND IRON, STEEL AND HARDWARE ASSOCIATION: C. C. Lewis of the Charles C. Lewis Company, Springfield, Mass.; L. L. Ensworth of L. L. Ensworth & Son, Hartford, Conn.

THE EASTERN NEW YORK AND VERMONT HARDWARE AND IRON ASSOCIATION: Chas. H. Turner of the Albany Hardware & Iron Company, Albany, N. Y.; John G. Wilkinson of Newburgh, N. Y.

THE IRON AND STEEL ASSOCIATION OF CENTRAL AND WESTERN NEW YORK: Chas. P. Rogers of Beals & Co., Buffalo, N. Y.

THE NEW YORK AND NEW JERSEY HARDWARE AND IRON ASSOCIATION: William E. Kleine of William E. Kleine & Co., New York; J. Henry Ruwe of Ruwe Bros., Brooklyn, N. Y.

THE PHILADELPHIA CARRIAGE HARDWARE COMPANY: W. R. Wilson of Wilson & Bates, Philadelphia, Pa.; Chas. P. Dowler, Philadelphia, Pa.

The reports made by the different delegates showed that each association was working harmoniously for the protection of jobbers' interests, and the co-operation of the manufacturers and jobbers in establishing and maintaining prices when possible. The system adopted for treating delinquent customers has proved a great success, not only in preventing the opening of unsatisfactory accounts, but it has also been the means of collecting what were considered worthless accounts.

The officers for the ensuing term are as follows: Wm. E. Kleine, president; E. P. Sanderson, vice-president; L. L. Ensworth, treasurer; J. H. Ruwe, secretary.

The New York and New Jersey Hardware and Iron Association held a banquet at Muschenheim's Arena on the evening of February 26, at which the following persons were present:

F. W. Wurster.  
Chas. D. Ruwe.  
Wm. E. Kleine.  
Walter T. Crane.  
A. J. Van Sant.  
Emil Rudolph.  
R. Tiebout.  
W. Tiebout.  
M. Eisig.  
J. Henry Ruwe.  
J. Doremus.  
H. Quackenbush.  
H. Bodwin.  
Phil. Langler.  
E. Van Winkle.  
Jno. G. Merkle.  
Geo. Hollereth.

Henry Kircher.  
John Delaney.  
L. B. Morris.  
Wm. Kugler.  
Jos. Ruppert.  
E. R. Merrill.  
Wm. Merrill.  
E. P. Sanderson.  
Fred. Butts.  
C. C. Lewis.  
L. L. Ensworth.  
Chas. H. Turner.  
John G. Wilkinson.  
Chas. P. Rogers.  
W. R. Wilson.  
Chas. P. Dowler.

After ample justice had been done the repast, William E. Kleine, toastmaster, welcomed the delegates. He then referred to the death of two members of the

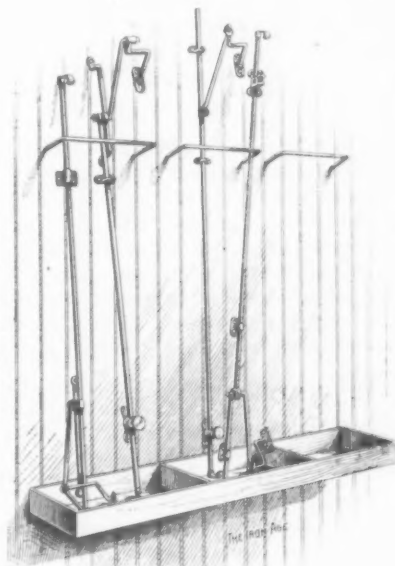
local association during the past year—C. W. Schluchtner and Frank Langler. Ex-Mayor F. W. Wurster of F. W. Wurster & Co., of Brooklyn, was then called upon to speak upon the subject of the Automobile Truck and the effect it would probably have upon the business of the members of the league. He prefaced his speech with eulogistic remarks upon the character and business qualifications of Mr. Schluchtner, with whom he had been associated in intimate business relation for 25 years. The speaker then spoke of the progress made in this country during the past three years in perfecting the motor wagon. In reviewing the growth of this branch of industry, he said the first steam motor wagon was constructed in France, in 1763, but that it was a crude affair. A successful wagon of this character was built in 1838, and in 1850 one was made which ran 350 miles. These were all French machines. The first record of an American motor wagon was in 1790, but a successful steam machine was built in New York in 1860, and was propelled by its own power to Madison Square Garden in 1902 and there placed on exhibition in the Sportsmen's Show. Referring to the possibility of the motor truck or delivery wagon superseding the horse truck and wagon, the speaker said that in a period like the present, when developments were so rapid, it was difficult to state definitely what would happen. After a careful study of the subject, it was his opinion that the initial cost of an electric motor truck, the expense of running it, repairs and renewal of the batteries were almost prohibitory to anything like a general use of motor wagons. The present use of them in this city was confined to a few large concerns, who used them largely as advertisements. The conclusion reached as the result of a comprehensive study, by the speaker, of a mass of statistics, was that the trade had little or nothing to fear from the loss of business resulting from the use of motor trucks in the near future.

The other speakers of the evening were Chas. P. Dowler, E. P. Sanderson, M. Eisig and E. R. Merrill.

The lighter entertainment of the evening was furnished by a professional pianist and vocalist and a humorist, who enlivened the intervals between the speeches.

### KEEPING TRANSOM LIFTERS.

TRANSOM Lifters are clumsy articles to carry in the Hardware stock. The accompanying illustration shows the method employed by P. J. Bolan, Water-



Keeping Transom Lifters.

bury, Conn., to accommodate this line of goods. It will be seen that the bottoms of the Transom Holders rest on a partitioned shelf, and that the top parts are kept in an upright position by pieces of  $\frac{1}{4}$  inch round iron bent into the shape of staples and driven into the wall.



# Ohio Hardware Association.

## CONCLUDING REPORT.

**F**OLLOWING is the address by E. D. Jones, with the Bostwick-Braun Company, Toledo, Ohio, on

### Relations of the Jobber's Representative to the Retail Merchant.

Please permit me to announce in the beginning that this attempt at public education and entertainment is my first offense at anything of the kind, and I trust that you will all do the very best you can to appreciate it. I was asked to read a paper before this convention touching upon the relations existing between the retail Hardware merchant and the wholesaler's traveler and entitled "The Jobber's Representative."

The request came from your well-known secretary, Dwight R. Burr, with the injunction that I was not to turn it down; and while there is no doubt that other Hardware salesmen here are better qualified than myself for the purpose, still as the honor has been so thrust upon me I feel that I ought not to allow our genial

jokes to make a living. A merchant who has this class of trade is to be pitied and should certainly receive a pension.

But how about this merchant? He has a list made out, with a great many staple articles on it, such as Barb Wire, Nails, Horseshoes, Poultry Netting, Wire Cloth, Bolts, Strap Hinges and similar staples. Then, at the bottom he has Razors, Table and Pocket Cutlery, Shears and Silver Ware. He shows you the list saying: "If you will get down on your price I will give you this order." So, thinking of the good things at the bottom the traveler gives him the very lowest price he can find in his catalogue, which causes Mr. Merchant to commence reading off the order, which he continues to do until he gets to the Cutlery part of it, when he is taken with such a headache that he is obliged to go home and lie down; so, saying that he has a fair stock of that class of goods anyhow, and that he will give you the order some other time, you are sent on your way, waiting for that "some other time" to arrive. Alas, it never does.

### A SPEAKING TUBE CONNECTION.

A few years ago I had in my territory a merchant who had an office on the second floor with a speaking tube running to the store room, and, before a traveler was allowed to go up to see him, the clerk would first have to break the news through the speaking tube and see if the buying department was open for engagements. This merchant carried a \$4000 or \$5000 stock and did from \$10,000 to \$15,000 of business annually, so he said, although I always thought that he did a great deal of this business in his mind, and should he have lost his mind he would have lost the larger part of his business. He always bought goods about 10 per cent. below the jobber's cost, and he caused many a salesman to lie awake nights and write long letters to his house advising them "to get in the game as they were not buying some of their goods right." This would be accompanied by quotations of some of the prices at which this man was buying, which would usually bring an answer from the house to the effect that they had a buying department engaged for the year, but should anything happen they would be glad to give this fellow a large salary to do their buying for them. However, at the present time the three last seats were for smokers and no more talent was required, and if the salesman would cheer up and hunt somebody who was not in the habit of buying quite so cheap he would do more business.

I well remember on one of my trips to see this man that I waited for about an hour before being allowed to see him, he being busy with John D. and J. Pierpont, and finally he informed me that he was in the market for a gross of Victor Rubber Buckets. They were selling at that time at \$8 to \$8.50 per gross. I quoted him \$8, whereupon he soared to the ceiling and after slowly descending informed me that he had been buying them at \$6, which was only \$1.50 less than our cost in 500 dozen lots. Being of an inquisitive nature I ventured to ask him if he would allow me to see the invoice. He replied that he was not in the habit of doing this, but would condescend to turn the head of the bill down and let me have a peep. The bill read, not one gross, but 1¢ at \$6, which was 64 cents a gross more than I asked him. He still insisted that he was correct and the 1 "¢" was merely a clerical error, so I told him one of the three last seats was still vacant and went on my way rejoicing.

A year or so from that time this party decided to sell out and the parties who purchased his stock asked me to invoice for them, which I did, and discovered that instead of buying for 10 per cent. less than the jobber's cost, he had been paying nearly retail price for his goods. To credit his amended story, when I arrived on the scene they had started to invoice and had some four pages down and priced. I was asked to look over the



secretary to lose any more sleep and so took a chance without guaranteeing results. Consequently if at the conclusion you do not all feel like "Sunny Jim" don't blame me, but blame your secretary.

My experience as a traveling Hardware salesman dates back about seven years, and I have had during that period a great many pleasant experiences, and also some which were not so pleasant, with the retail Hardware merchants throughout my territory. I have found that

### THE MOST UNSATISFACTORY TRADE

to do Hardware business with is the general merchant located way back in the country where the sky seems to meet the earth, and you have to lie on your back to see the sun. His Hardware stock consists of about one bushel of Shelf Hardware, some Steel Goods, Poultry Netting, Barb Wire and a few Nails. His customers as a rule come into the store with a basket of eggs and butter on one arm and the catalogue of some catalogue house under the other, and after getting the highest possible price for their produce open up the catalogue and quote the merchant Chicago prices on everything they wish to purchase, assuming that the middleman requires no profit for carrying on his business, and has nothing to do save ride around in varnished cars, smoke good cigars, wear fine clothes and crack a few

same and see how the prices were. I did so and found that he still had the happy faculty of reading his invoices in his own way. The first page showed an overcharge of \$37.42. Among some of the items were Enterprise goods at 25 per cent. off, No. 8 14-ounce Nicked Tea Kettles at 90 cents each, which was the retail price of his competitor. The same thing was true about everything he had down, and the only thing left for him to do was to call me a robber and aver that he knew more about the prices of hardware than either his competitor or myself.

#### A GRANITE WARE SALE.

I wish to relate a circumstance which occurred during the time that St. Louis Granite Ware was selling at the contract price of 40 and 10 per cent., this price not to be cut under any circumstances. I was taking an order for a bill of these goods when in the midst of it the buyer stopped and said: "By the way, Jones, what price do I get on this ware?" I told him it was all in at 40 and 10 per cent., it being a contract price and the house would not bill it at less than that. He said he had been getting an extra 5 per cent., the salesman giving same and paying it out of his own pocket. I said to him: "Is it not a fact that you are a leading member and deacon of the Methodist Church, also superintendent of the Sunday school?" He replied that he was, but wanted to know what that had to do with buying Granite Ware. I told him that it was just such deals as that he was reeling me off that sent many a good fellow to the pen. By reeling out of their pockets they gave away their salary, and when their wife needed a little money were obliged to get color blind and not be able to tell the firm's money from their own. The first thing they knew they were short with their firm, and must either make the shortage good, go to Canada and leave their happy home, or to the pen for a season. After listening to this heartrending speech the merchant said he had never looked at it in that light, but since I had mentioned it he remembered of one good fellow who had done that kind of work and traveled the route I had mentioned, and gave me the order.

#### A LITTLE DISAPPOINTMENT.

A few weeks ago I called on a merchant, having arrived at his place of business at 6.30 a.m. It was about 8.30 or 9 when he put in an appearance, after which time he was very busy until about half an hour before train time. He came, though, in time to start giving me an order, and when he had partially finished and my train was about due to leave I told him I had an engagement that afternoon in the neighboring town with a party to sell the Hardware trimmings for a fine residence and would be back to see him in the evening and finish up. He was one of those whole souled, good hearted fellows. He stated that he would call me up by 'phone that afternoon, providing I would pay for the message, and give me the balance of his order. I thanked him very kindly in advance for the favor and went on my way with a light heart, but the afternoon passed and no word from him. So I called him up in the evening and asked him about the order. He replied that he thought maybe I had been called away to West Virginia or some other far off place on special work, and he had that evening given his order to another fellow, and that I might therefore cancel what he had given me in the afternoon. I simply mention this in a general way, so that you will see that our path is not always strewn with roses.

I have a customer on my territory whom I consider

#### THE BEST RETAIL HARDWARE SALESMAN

I have ever called on. He gets credit for selling goods very close, but in reality gets a very long price at the right time from the right people, and a very close price from every one he buys goods from. One thing in particular which is new, at least to me, is a special he has on Barbed Wire, this product being sold very close in his locality. He has a special label printed in big red letters with the American flag in one corner which reads as follows: "America's Favorite is Cleveland Ohio Kind Barbed Wire, made of the best quality steel and heavily galvanized to prevent rusting." The strands are made of No. 12 Steel Wire. He has his advertisement at the

bottom of the card and tacks one on each spool of Barbed Wire in stock, and I have known him to get 10 cents per 100 more in 100-pound lots than his competitor, simply because he has no competition on the Ohio Kind Barbed Wire. I have noticed this same merchant, while selling a 24-pound Family Scale (and his price, the customer stated, was too high) to reach up and catch hold of the set screws and adjust the indicator and say: "Did you notice the other fellow's Scale had the micrometer adjustment?" Of course he sold the Scale, for the buyer had not seen the adjuster on the other Scale.

At another time I noticed this man pricing a solid box Vise to a customer who said he "could buy the same Vise, at least it looked like the same Vise, down street for 50 per cent. less money." The dealer replied that this Vise was made from "the highest quality gun barrel steel, highly decarbonized, with case hardened jaws." The fellow took the Vise and went on his way happy. This merchant almost invariably gets 35 cents for the cheapest kind of Rim Lock, and I have



W. P. BOGARDUS, President.

seen him sell Blair's Hog Ringers, which cost 75 cents a dozen, at 25 cents each. I asked him one time how he could do it, and he told me he had made a study of learning his trade, and knew just when and where to make a profit to even up on the Horseshoe Nails, Barbed Wire, &c.

There is a section of my territory

#### WHERE HARDWARE IS SOLD FOR CASH.

and for cash only, and I wish to say that I know for a positive fact that their business has increased every year since they started it. They are located in purely agricultural districts, fully 75 per cent. of their trade being from the rural population. One firm in particular has been in the retail Hardware business since 1843, always doing a long time credit business up to about four or five years ago, at which time they started on a strictly cash basis, and have been there "everlastingly at it" ever since. If any one in this audience should doubt this I refer him to W. P. Scott of the Morris Hardware Company, McConnellsville, one of your oldest and most enthusiastic members.

I think there are some merchants who do not give the jobber the full amount of credit that he deserves, and at times they wander off to the manufacturer, placing their good orders, they think, to better advantage than they could receive from

#### THEIR BEST FRIEND, THE JOBBER.

who sends his representative around to keep them posted, and to hand them out many of the good things he has discovered through the buying department.

The jobber, instead of being on the gold brick order, is just the reverse and willing to share any profit he may



## Ohio Hardware Association.

have secured by careful buying with the retailer who sticks to him and pays for his goods when they are due, for be it remembered that money is as necessary as trade to keep business moving. The manufacturer has nothing for you excepting to get your orders for his one particular line and tack on an extra 5 or 10 for good will and his trouble in handling small orders.

I have called on a few merchants during my limited experience, who, not thinking of the misery they are causing at the time, tell us that we are nice men and that our house is of the very highest quality, that in the future they intend to give us the larger part of their trade. They tell us they buy principally through the manufacturers, so that their orders with the jobber are not very large; however, from the fact that we are such very fine men and represent such high grade houses, upon our next visit to their town they will give us a very nice business. We pass out of their store with a light heart, thinking of the good customer we are about to make for the house and the raise in salary that will



JOHN F. BAKER, Vice-President.

come to us the first of the year on account of the increase in our sales. We continue on our trip, thinking of the good things that are to come when we next make that town. We do everything but write up the order before we get there, as he surely would not tell us he would save us a nice order unless he fully intended to do so. However, our "pipe dream" is soon over, and we wake up to find that, instead of getting the order that we have figured on for the past month, the merchant gives us the same old story, rubbing in more salve with the usual trimmings of hot air.

### THE HARDWARE, SALESMAN WHO TRAVELS FOR A LIVING

spends the greater part of his life with his friends, the retail Hardware merchants. Of course, we hear of a few of our brothers who enjoy the society of the blacksmith, the saw and planing mill man, the furniture man, and, though I hate to say it, I have heard of some who peddle their high grade legitimate Hardware to the racket store man, who uses it as a stool pigeon in order to sell the junk that is in keeping with stores of this caliber (22 short). The men who peddle their goods to the above class of trade, of course, will say that if they don't sell those people some one else will, which is no doubt correct; but if the legitimate Hardware jobbing houses do not ship them goods they will be forced to get their stuff from the junkman, who cannot furnish them with Hardware of standard brands, but only such goods as have no parents or have parents who are ashamed to own them. They are, however, two sides to the racket business. I have had good Hardwaremen tell me their troubles regarding the racket store man

selling his stuff at so close a price, and he would not buy from a Hardwareman that sold them; and then this same merchant would turn right around and buy from a jobbing racket store and cut the legitimate jobber short on that much of the stuff, which he ought to give to the Hardware jobber who confines his sales to the legitimate Hardware trade.

I find that in some towns

### A VERY BITTER FEELING EXISTS

between the retail Hardware merchant and his competitor. In some cases it is so very bitter that they do business seemingly for their health only, selling goods at any old price to keep the other fellow from doing business. Physical culture is a very good thing, but when it gets to a point where Hardware merchants wrestle with Barb Wire, Nails, Bar Iron, &c., for their health only, they not only waste their time and energy, but rob themselves and family of the many good things of this life that come to those who make this life a financial success. I have found in every town that Hardware merchants are bound to have competition as long as they remain in business, and I feel that it is far better to cultivate a friendly feeling with your present competitor than to have him sell out to some one who might be lots worse than he is. I sold two parties in a town one time who were so bitter toward each other that when I suggested to one of them that he and his competitor go together and buy a car of Nails and Wire and save 9 cents per 100, he informed me that he would not have any goods associated with anything that belonged to his competitor. However, I took it upon myself to ship their orders in the same car as a carload at the carload price. They were very much pleased with the deal, and have bought that way since.

We find in our travels that the large majority of the retail Hardware merchants, notwithstanding the fact that they are very busy men, are

### ALWAYS GLAD TO SEE US,

giving us a liberal portion of their time. They figure that we have come to see them to get orders and start right in giving us what they have for us, so that when the train comes along we are ready to go on to the next town. I wish to say that the merchant who does business with the traveler in the manner just mentioned is the fellow who gets the good things that the traveler has up his sleeve, for time is money to the traveling salesman, and when he is obliged to spend a day to get a small order that he could have taken in five minutes, some one has got to pay for it besides the house.

Our most enlightened thinkers have learned that in the affairs of nations fair play and reciprocity are better and more profitable than sharp practice and war, and along the same lines of thought our most successful retail merchants have been convinced by experience that reciprocal fairness in their dealings with the legitimate jobber is the more profitable and more satisfactory method to pursue in the long run. May we all live to see the day when every member of this organization follows this golden rule of trade!

### Discussion.

MR. WISEMAN: I think there is no man in the house but will agree with me in saying that that is one of the best papers that has ever been read before our association.

President Bogardus called for remarks on the subject from traveling men present, first calling on Mr. Nichols, of the Lockwood-Taylor Company.

MR. NICHOLS: Mr. Chairman, I am in the position of the young girl who had the proposition of marriage. She said, "it was entirely too sudden."

PRESIDENT BOGARDUS: This is the first time I ever knew anything to be too sudden for a traveling man.

JOHN W. BAKER: Mr. Jones made an excellent point when he said that the proper thing for a merchant to do was to be ready when the traveling man came. That was one of the best points in a paper that was full of good points, and that is the man should be ready. Now, I have made it a point to be ready for the traveling man when he comes, because he has his hand in his employer's pocket, and time is money, and the proper thing

I think for a merchant to do is to be ready for the traveling man and say to him at once whether he does or does not want any goods. I believe it is only a matter of justice that he should do this. I was reminded of a little incident that happened in my store a few years ago in connection with a Cutlery agent, who came from a New York house. It was about the time of the general depression in the Hardware business some five or six years ago. There came into the store a traveling man representing a German Cutlery house in New York. I told him that there was nothing that we would want that morning. "Well," he says, "Mr. Baker, that is



W. C. JONES, Financial Secretary.

about the same razzle dazzle that I have been getting for about a week. I don't know whether anybody is buying any Cutlery. They are not buying it from me." He says, "I only got one order last week. When I reached Pittsburgh I got a letter from my house giving me 'hail columbia' for not sending in any orders. I will get to Cincinnati to-morrow. I have not sent in any orders this week. I know what I will get at Cincinnati—I will get another one of the same sort, but I expect a letter from my girl at the same time and that will offset it."

Other traveling men were called on for remarks, and two or three responded with short humorous stories.

President Bogardus stated that the association were indebted to the Hallwood Cash Register Company for the badges used at the convention by the delegates, which had been donated by that company.

#### Report from the Delegates to National Association.

Next in order was a report from the delegates to the meeting of the National Association. This report was made by F. A. Powers of Norwalk, who said:

I am placed in a rather embarrassing position in some respects, from the fact that I was not advised until almost the close of the national convention that I was expected to make a report to you. I therefore took no notes and must depend almost entirely on my memory, and after so long a lapse of time I feel that I shall not offer anything that will be of much importance or of much interest to you. I remember of arriving in Chicago one morning in March, after a night's ride in a sleeper, and of meeting Brother Bogardus in the lobby of the Palmer House. He suggested that the first thing I ought to do was to arrange for my transportation home. "Well," I said, "I have seen Chicago and am ready to move on." After awhile a fellow came around and pinned a gorgeous badge on my coat, and I began to feel better and imagined I was one of the "its."

The National Association is not so representative a body of business men as we are in point of numbers. There were but 12 States represented at the last convention, and at no time were there more than 30 mem-

bers present. The membership is made up largely of officers of the various State associations. I want to say to you now that I felt very highly honored in meeting the class of men there that I did. They are among our brightest men in the various State organizations. Most of the time of the convention was taken up with the discussion and decisions in regard to President Lewis' recommendations. Most of you, I presume, have received a copy of the "Bulletin" of the National Hardware Association that was sent out, and know what those recommendations were. One of the important matters discussed was the Parcels Post bill pending before Congress. I am glad to say that that bill has not yet passed. The National Association is fighting it. I hope you will give them all the support you can.

Another matter that came up, and which, from the remarks I have heard, I presume has been discussed here at some length, was in regard to the national insurance plan. The plan was not favorably considered by the association, the members feeling that the time had not arrived for it. I think at some future meeting the matter may be taken up.

I also want to say in connection with this that I feel very sure that the dollar you have invested in becoming a member of the National Hardware Association is money well expended. There are a whole lot of matters that the National Association are working upon all the time, and they will be able to do us a great deal of good. I think that most of us can settle our own differences with the jobbers and the manufacturers; at the same time it is a good thing to have this organization back of us. You want to use them and not abuse them.

#### Report of the Grievance Committee.

Mr. Meyer, for the Grievance Committee, made the following statement:

Mr. Chairman, your Grievance Committee is pleased to state that there are no grievances in the hands of the committee, everything of this character having been adjusted satisfactorily, I believe, to all concerned the past year.

PRESIDENT BOGARDUS: That is a good report. That comes to us largely from the fact that everybody has had



C. M. WALLER, Treasurer.

all the business he could attend to; but I am afraid the time is coming when our reports from this committee will not be so pleasant.

President Bogardus then called the attention of the association to the grievances of several of the members against the George Worthington Company of Cleveland, which was acted on by the association at its last session. He said he thought there was good reason for the association to withdraw from the position it had assumed at its last session toward the George Worthington Com-



## Ohio Hardware Association.

pany. Considerable discussion followed on the subject. The following resolution was then adopted:

Whereas, circumstances have arisen that justify us in our action, we therefore recommend that all discrimination against the George Worthington Company be abandoned by this association.

### The Question Box.

The Committee on Question Box brought forward the box and the questions were read by the chairman of the committee, Mr. Jacobs.

1. *Is a good stock keeper of value in a store? A stock keeper is one who is always looking to see if there are any seasonable goods that are getting low. How is a good stock keeper made?*

A DELEGATE: Get a small boy and let him grow up with the business.

W. L. JACOBS of Youngstown: My opinion is that the best man you have in the store is not too good to have



D. R. BURR, Corresponding Secretary.

as a stock keeper. He is one of the most important men you have.

2. *What advantage is there in price cutting?*

J. P. DUFFEY of Greenville: I think that question applies to us when we are at home. The price cutting business is simply cheating the other fellow out of the business. The question is not appropriate when we are all away from home and shaking hands with each other.

3. *What do the members think of syndicate buying for the retailer? Give experience if you have tried it.*

PRESIDENT BOGARDUS: You remember the jobbers at New Orleans last fall issued a manifesto against syndicate buying. They have taught us some things.

4. *Are the contractors a good medium for advertising a store? What are some of the approved methods of getting their good will and influence?*

Several members expressed themselves that they found it to their interest to keep the good will of the contractor at all times.

5. *What is the best method of doing a credit business?*

Mr. Duffey said he considered that an important question; that he was doing a credit business and wanted to know if any one had a better method of doing a credit business than he had.

One member stated he had no trouble doing a cash business, as his only competitor was doing the same thing.

6. *Is the giving of a 5 per cent. discount in stamps for cash sales a trade winner?*

PRESIDENT BOGARDUS: The general opinion is that it is not.

7. *What relation has the proprietor of a store to its success and the efficiency of his clerks?*

A DELEGATE: Everything.

On motion the convention took a recess until 2 p.m.

### Mutual Insurance.

The afternoon session was initiated by the reading of the first report of the Ohio Hardware Dealers' Mutual Fire Insurance Company by Geo. M. Gray, Coshocton, secretary. This report was published in our last issue.

Mr. Duffey, president of the company, then addressed the convention at some length, explaining the working of the insurance plan and urging the members to give it their support. He said the members of the committee had spent a great deal of time in pushing the matter to a successful termination.

President Bogardus invited A. I. Vorhees, the Commissioner of Insurance of the State of Ohio, to address the convention. Mr. Vorhees said:

### Address by the Insurance Commissioner.

I am very glad to be here and glad to meet you all. This is going to be a nation of associations. Every branch of business has its association, and it is good to have them; and the gathering here together annually not only results in social intercourse that must be intellectually profitable and pleasant to you all, but affords you opportunity to confer about your business, and incidentally in this session, I believe, about the history and progress and future prospects of your insurance association.

It would not be becoming for me to here suggest any criticism or make any remarks respecting the operations of your insurance company. Anything in that respect should come officially from the department. I conceive, however, no impropriety in saying to you this afternoon that next to yourselves there is no one more interested in your prosperity than the insurance department of Ohio. You have conceived the notion that insurance companies were charging you too high rates, and that the rates were arbitrary and the result of a combination. It is not my purpose to say here or form any opinion whether that conception is true or not, but there is this about it, that you have certainly proceeded in the logical and sensible way to test this question. You can demonstrate for yourselves whether you have been paying too much. You can demonstrate it without any great cost of money to yourselves. You are illustrating here now one of the great antitrust doctrines. We all have our opinions about trusts in this age of trust agitation and discussion. Hardly any two persons agree upon the subject—the future of trusts and the remedies that ought to be applied to them. There is no more intelligent, industrious, aggressive and successful body of individuals on earth than the American merchants. I am one of those who believe that while there should be legislation to regulate and restrict and curb and suppress great aggregations that attempt to arbitrarily fix prices and control commodities, yet I believe, on the other hand, that the great American trust buster of the future is going to be this body of the American merchants.

Now you have established here an organization that I can say I wish the most prosperity for. You have the elements and the material for prosecuting a great and successful organization. The fire insurance business is a precarious business; unlike life insurance, it is strictly a gamble. You may proceed through 1903 without a severe loss, but you may have a loss that will startle you. I can conceive of no impropriety in saying to and suggesting to you that your inclination should be along conservative lines rather than a dash for a large volume of business. You should learn to crawl before you try to run.

### Other Addresses.

D. L. Glaskill, one of the attorneys for the insurance company, who had assisted in their formation, was introduced, and addressed the convention on the work that had been done and recited the difficulties under which

the committee had labored in getting the insurance company on their feet.

E. S. Nail, the president of the Lumbermen's Mutual Fire Insurance Company, was invited to address the convention on the subject of fire insurance.

Mr. Nail said they had made a success of their association; that they were now paying a dividend of 30 per cent., having raised the dividend from 25 to 30 per cent. the first of last January. He said that for several years they had but few losses, but during the past year their losses had been comparatively heavy; yet, in spite of that fact, they had been able to declare an increased dividend.

William Barton, secretary of the Delaware County Farmers' Mutual Fire Insurance Association, was invited to address the convention. He gave an account of their experiences in forming and building up a fire insurance association. He said they had been quite successful. He suggested that the different mutual insurance associations of the State of Ohio publish a periodical in the interest of the mutual insurance associations of the State.

On motion the report of the Insurance Committee was adopted, and ordered to be spread on the minutes of the association.

#### Dressing a Hardware Store.

Next on the programme was a paper by S. W. Gano, with the Norvell-Shapleigh Company, on the subject of "Dressing a Hardware Store," as published in our last issue.

Referring to Mr. Gano's paper, Mr. Baker said:

I think that was a very good paper, and I think before I sit down I shall move a vote of thanks to Messrs. Jones and Gano for the papers they have read to us. A few years ago a Hardwareman met me as I was going to the railway station to take the train home, and he said: "Mr. Baker, when I get home I am going to clean up my store." He says, "I learned something at this session." The fact is, Mr. President, that Hardware stores to-day are not the Hardware stores of 20 years ago. Our stores are now visited by more ladies than ever before, and it is necessary for us to keep in line with the times and with the other merchants by keeping clean Hardware stores. I will renew my motion that a vote of thanks be tendered to Messrs. Jones and Gano for their papers.

The motion was seconded and unanimously carried.

Secretary Burr read a telegram of congratulation from the Kentucky Retail Hardware Dealers' Association.

At this time a messenger boy brought in a box of flowers and handed the same to President Bogardus with a note. President Bogardus read the letter, as follows:

*Dear Sir:* As an old Hardwareman and one who remembers with much pleasure the kind reception given him by the members of the association at their banquet last year, I send these roses for their banquet to-night, hoping that the occasion may be an enjoyable one in every way.

Yours truly,

JAMES KILBOURNE.

MR. WISEMAN: I would like to move, if I am in order, that we send Mr. Kilbourne for this generous and thoughtful gift a royal vote of thanks.

The motion was seconded and unanimously adopted, and Mr. Wiseman was instructed to advise Mr. Kilbourne of the action of the association.

MR. SCOTT: I move, if there is no further disposition to be made of the flowers, that after the banquet the president be instructed to take them home to his wife.

The motion was seconded and carried.

MR. SCOTT: The thought occurred to me when we were voting our thanks to these men that got up these papers that it requires lots of work to get up these programmes, and I move a rising vote of thanks be tendered to our president, secretary and Executive Committee for their success in getting up such a desirable programme and securing such competent men to address us.

The motion was seconded and unanimously adopted.

#### Question Box Continued.

The Committee on Question Box proceeded to read the questions in the box.

8. *What rate are you paying for insurance?*

Several delegates responded, saying they were paying all the way from \$1.25 to \$3.

President Bogardus called for all who had taken insurance in the new company to rise. A large number arose. He also asked for those who had not taken out insurance to rise, and a large number arose. He also asked those to rise who intended to take out insurance in the new company, and there was a general response in the affirmative by those who had not yet taken out insurance in the new company.

9. *Is it a good policy to make an advertisement of the "O. H. A." badge?*

President Bogardus said he thought it was.

10. *Do you ever use Paint Pumps and Cold Water Paint? If so, what success?*

Several members said they had found them satisfactory, and they had sold a number.

11. *What advantage is it to have traveling men come to see you, and what is the best way to receive them?*



MELL B. TALLMAGE, Executive Committee.

Mr. Duffey said they should be received courteously; that the traveling man has all kinds of information that he will give you if treated courteously.

12. *Is it desirable for the Hardware trade to handle 5 and 10 cent specialties?*

MR. KENNEY: I believe if all the business men in a town in any particular line would agree to handle 5 and 10 cent articles in their line it would soon do away with the 5 and 10 cent stores in their towns.

13. *What profit is there to us as merchants in the present bankrupt law?*

MR. KINNEY: I think from that cause the Hardware dealers have not lost 5 per cent.

Mr. Perry said that 75 per cent. of his losses during the past year has been from this cause; that merchants had failed and gone into bankruptcy.

14. *Do all the members receive the National Bulletin regularly, and what do they think of it?*

MR. SHEARER: We have received the Bulletin regularly, and it contains a great deal of valuable information.

SECRETARY BURR: I would like to say if any members of the association are not receiving their manual and they will advise me, I will see that they receive it.

Several members stated that they were not receiving the National Bulletin regularly.

On motion the convention took a recess until 9 a.m. February 26.



## Ohio Hardware Association.

### THURSDAY MORNING SESSION.

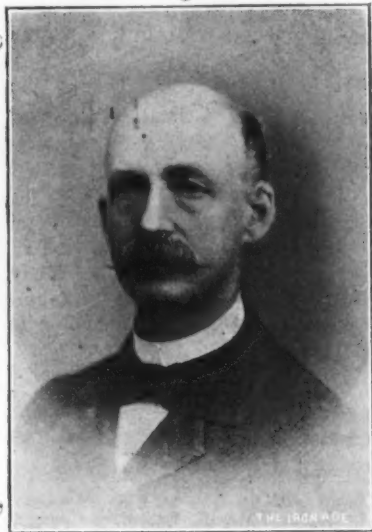
Mr. Duffey addressed the convention on the subject of the financial condition of the fire insurance association.

It was moved by Mr. Baker that the adjustment of the amount due the Ohio Hardware Association from the insurance company be deferred until the next annual meeting of the Hardware association. The motion was carried.

The secretary read a telegram from R. R. Williams, Hardware Editor of *The Iron Age*, as follows:

I regret that circumstances have conspired against my attending your convention and addressing you in accordance with your kind invitation, but I am gratified that you are to have the advantage of the presence and counsel of Mr. Cope. I should have been glad, personally, to meet your members again, and to get into close touch with the good work your association is doing. With progressiveness in the conduct of business by the individual merchant, conservative and fraternal regard for the rights and interests of others, and an organized effort for the correction of trade abuses, I cannot but hope that the retail Hardware trade will see an improvement in existing conditions, to be accompanied by enlarged prosperity, in which your members will have, I trust, an ample share.

A motion was made and carried that Mr. Cope be ex-



F. A. POWERS, Executive Committee.

tended the courtesy of the association, with the opportunity to make an address.

Mr. Shearer read the report of the Committee on Laws relative to the Hardware trade, as follows:

Resolved, that in our opinion the Parcels Post bill now pending contains features that are detrimental to the interests of the Hardware retailer, and will retard the speedy transmission of our more important mail matter, and we believe will also materially increase the present deficient postal appropriation.

Therefore, be it resolved that this convention, through its proper officers, urge the early co-operation of similar State retail Hardware associations, through the National Retail Hardware Association in exerting our influence in opposition to the passage of the bill.

'On motion the report was adopted.

Mr. Cope of *The Iron Age* was invited to address the convention and proceeded to do so at some length, his remarks being of a general character.

President Bogardus said that the association had a further compensation for the absence of Mr. Williams, as *The Iron Age* every week had something from the pen of Mr. Williams.

The report of the Memorial Committee was read by Secretary Burr, as follows:

Since the last meeting of the Ohio Hardware Association we are called upon to mourn the death of one

of its members, Edward E. Barch of Elyria, favorably known to all of his competitors and generally well known to a large number of us as a traveling salesman, and his death is lamentable especially as he was stricken fatally with typhoid fever at his house at the early age of 35 years. Your committee beg leave to submit the following resolutions.

*Resolved*, That we have lost in Edward E. Barch of Elyria, Ohio, a valued and honorable member of the Ohio Hardware Association, and his customers and competitors an honorable friend.

*Resolved*, That these resolutions be embodied on the minutes of our annual meeting and a copy be forwarded to the family of the deceased.

The report of the committee was accepted and the resolutions adopted by a rising vote.

### H. G. Cormick's Address.

H. G. Cormick, president of the National Retail Hardware Dealers' Association, then addressed the association. He referred to some matters relating to grievances which the National Association was endeavoring to remedy, and spoke at length of the work the association had accomplished and expected to accomplish in the near future for the benefit of the Hardware dealers throughout the different States. He said that new States were continually being added to the membership.

On motion of Mr. Duffey the association went into a committee of the whole to take up the business of the insurance association. Ballot was taken for the election of two directors of the insurance association to fill vacancies. Geo. B. Meyer of Cincinnati and Henry F. Rahe of Cleveland were elected to fill the vacancies.

### Election of Officers.

The following officers were elected for the ensuing year:

PRESIDENT: W. P. Bogardus, Mt. Vernon.

VICE-PRESIDENT: John F. Baker, Dayton.

CORRESPONDING SECRETARY: D. R. Burr, Piqua.

FINANCIAL SECRETARY: W. C. Jones, Columbus.

TREASURER: C. M. Waller, Ravenna.

EXECUTIVE COMMITTEE: F. A. Powers, Norwalk; Geo. Hartke, Cincinnati; E. Fisher, Wapakoneta; J. C. Snyder, Ironton; F. M. Potter, Cleveland.

DELEGATES TO NATIONAL RETAIL HARDWARE DEALERS' CONVENTION: H. C. Wiseman, Springfield; Frank A. Bare, Mansfield.

ALTERNATES: D. R. Burr, Piqua; Henry F. Rahe, Cleveland.

President Bogardus called for the report of the Committee on Resolutions. The committee made the following report:

This committee being satisfied with the resolutions of 1902 have decided to recommend them for 1903.

MR. SCOTT: I move that a vote of thanks be tendered to the manager of the Great Southern Hotel for the treatment we have had here.

The motion was seconded and carried, and also the report of the Committee on Resolutions adopted.

### Cleveland Chosen.

The question of the next place of meeting was then taken up.

Mr. Rahe of Cleveland moved that the next annual meeting of the association take place in Cleveland.

Mr. Baker of Dayton nominated Dayton as the next place of meeting. Mr. Baker admitted that Dayton was a little short of hotel accommodations, but said that some of the members were able to walk the streets, and a hotel was unnecessary for some of the members. Mr. Scott said he had had that experience on one occasion at Dayton.

Mr. Bassell of the Columbus Board of Trade gave the association a vigorous and cordial invitation to return to Columbus.

A telegram was read by the secretary from H. W. Luetkemeyer & Sons of Cleveland urging the association to hold their next meeting in Cleveland.

A ballot was taken, resulting in the selection of Cleveland as the next place of meeting.

Mr. Baker made a motion that the thanks of the association be tendered to the president and his brother officials for the able manner in which the meetings had been conducted. The motion was seconded and unanimously adopted.

On motion the association adjourned *sine die*.

### The Banquet.

A permanent feature of the annual meeting of the Ohio Hardware Association is a banquet. The ninth annual occasion of this character was celebrated on Wednesday evening. It is worthy of remark that the banquets of this association are absolutely independent affairs, each member paying for his dinner if he chooses to attend. No liquors are served.

The dining room of the Great Southern Hotel was used. A souvenir menu was placed at each plate. During the serving of the courses an excellent orchestra furnished delicious music. The post prandial exercises were under the direction of President Bogardus as toastmaster, who acquitted himself superbly. Addresses were delivered by E. L. Taylor, Jr., prosecuting attorney of Franklin County; H. G. Cormick, president of the National Retail Hardware Dealers' Association, and R. H. Jeffrey, vice-president of the Jeffrey Mfg. Company, Columbus. All the addresses were eloquent and inspiring. The Amphion Octette, a local club of male voices, sang a number of choice selections, alternating with the addresses. About 275 participated in the banquet.

### Attendants at the Convention.

Chas. S. Johnson, Barberton.  
J. C. Fuhr, Williamsburg.  
J. T. Evans, Plain City.  
E. B. Dakin, Harveysburg.  
J. K. Milligan, Bellefontaine.  
W. W. Osborne, Bellefontaine.  
E. Pleuharp, Logan.  
W. H. Fledderjohann, New Knoxville.  
F. B. Karl, Delaware.  
R. W. Bolenbaugh, Canal Winchester.  
W. L. Jacobs, Youngstown.  
T. J. Lawlor, Youngstown.  
John Henne, Youngstown.  
G. V. Guyton, Ada.  
C. F. Wilkins, Youngstown.  
F. K. Dixon, Martin's Ferry.  
Geo. Y. Arthur, Conneaut.  
W. B. Taylor, Jackson's Center.  
A. C. Rohrbacher, Akron.  
Isaac Ulery, New Carlisle.  
W. P. Bogardus, Mt. Vernon.  
Edward Fisher, Wapakoneta.  
Wm. Witte, Haskins.  
J. M. Martin, McComb.  
Chas. A. Kuhlman, Woodville.  
H. C. Wiseman, Springfield.  
W. W. Kraft, Ashville.  
H. H. Bodey, Dayton.  
T. A. Casteil, Murry City.  
Jacob Fink, Mt. Healthy.  
F. Hamburger, Dayton.  
J. A. Roselius, West Alexandria.  
B. Baddy, Toledo.  
W. H. Romer, St. Henry.  
J. C. Snyder, Ironton.  
Wolf Hardware Co., Hollansburg.  
Kuenzli Bros., Nevada.  
E. J. Becker, Cincinnati.  
R. C. Downs, Coshocton.  
Geo. B. Meyer, Cincinnati.  
E. E. Morr, Ashland.  
A. L. Shearer, Dayton.  
O. M. Scott, Marysville.  
Adam Strone, Warsaw.  
W. H. Huffman, Arcadia.  
A. A. Norton, Chicago, Ill.  
Louis F. Giebel, Cincinnati.  
C. M. Crouse, Cedarville.  
Seeley & Beery, Columbus.  
J. M. Kinsey, Kenton.  
C. C. Heller, Beaver Dam.  
J. C. Conwell, Xenia.  
H. N. Askam, Findlay.  
D. H. Horne, Louisville.  
Henry F. Rahe, Cleveland.  
T. W. Walker, Cleveland.  
F. M. Potter, Cleveland.  
Gassman Bros., Findlay.  
J. H. Smith, Columbus.  
T. F. Rockwell, Toledo.  
R. L. Seeds, Columbus.  
Mayer Guthke, Columbus.  
N. C. Alten, Lorain.  
V. D. Jenks, Xenia.  
F. O. Schoedinger, Columbus.  
C. C. Fouts, Middletown.  
J. E. Smith, Caldwell.  
H. M. Bechtel, Oreville.  
E. D. Wilgus, Newcomerstown.  
H. W. Hobart, Pemberville.  
A. C. Bechtel, Oreville.  
Edward Kell, Pemberville.  
J. F. Donahue, Sandusky.  
C. B. Smith, Malta.  
C. W. Jewell, Utica.  
Robert Baur, Toledo.  
R. S. Frame, Washington.  
C. C. Hall, Arcanum.  
J. P. Duffy, Greenville.  
T. J. Swint, Fremont.  
Howard Long, Martin's Ferry.  
N. T. Henders, Harrod.  
S. C. Hyter, Bradner.

Geo. Doersham, Columbus.  
J. W. Duvall, Columbus.  
O. L. Curry, Owosso.  
F. Buel, Columbus.  
O. B. Ervin, Jackson.  
N. T. Mahon, Cambridge.  
J. W. Zimmerman, Doylestown.  
E. Dannemiller, Doylestown.  
H. P. Resch, Gallon.  
J. M. Weaver, Basil.

I. C. Wellbaum, Brookville.  
Stephen P. Wannamacher, Ottoville.  
Chas. Ruhl, Columbus.  
R. C. Horne, Cleveland.  
Geo. M. Gray, Coshocton.  
C. A. Kraft, Columbus.  
E. D. Jones, Toledo.  
J. W. Grimes, Cambridge.  
W. C. Jones, Columbus.

### NOTES OF THE CONVENTION.

The arrangements for the meetings of the convention were very satisfactory. Under one roof the Great Southern Hotel could not only comfortably house the members, the visitors and the exhibits, but it also furnished a fine hall for the meetings, and an opera house if an evening's theatrical entertainment was desired.

Every evening the city presented a festival appearance, arches of electric lights spanning the principal streets. These arches are permanent fixtures, constantly in readiness for a celebration of any character. High street was especially impressive to the visitor with its glowing arches, apparently stretching for miles.

The badges worn by the members of the convention were donated to the association by the Hallwood Cash Register Company, Columbus, in appreciation of the fact that the sessions were held in their city.

The Estate of P. D. Beckwith, Dowagiac, Mich., hospitably received all visitors in a suite of rooms on the parlor floor of the Great Southern. Doe-Wah-Jack was as usual conspicuous, but the actual duty of attending to callers was gracefully borne by J. O. Becraft and John A. Howard, assisted by W. G. Howard of Kalamazoo, Mich., one of the executors of the estate. They distributed Souvenir spoons, Match Boxes and Round Oak stick pins.

The Allith Mfg. Company, Chicago, exhibited their line of Reliable Door Hangers, an overhead Freight Carrier, and a model of a new Fire Door. They manufacture Door, Barn Door and Fire Door Hangers, with tubular track. The Fire Door has a fusible link. Their overhead Freight Carrier is guaranteed to carry a weight of 5000 pounds, and has been tested to 8000 pounds. F. E. Sladden and E. W. Kingsbury represented the company.

S. F. Bowser & Co., Fort Wayne, Ind., exhibited several of their self measuring and computing Oil Pumps and Tanks, admirably designed to save trouble, time, space and leakage in handling greasy liquids. These Pumps are arranged with an index for selling by measure and a scale for selling according to price. An ingenious arrangement for handling gasoline with entire safety was shown. Demonstrations were made by Charles A. Dunkelberg, J. D. Gumpfer and F. A. Knoche.

The National Paint & Varnish Company, Cleveland, Ohio, represented by Lionel M. Stern, not only made an exhibit of their Graphite Paint and Varnish, but made frequent practical tests of its elasticity, toughness and ability to endure contraction and expansion.

The Rochester Stamping Company and Robeson Cutlery Company, Rochester, N. Y., represented by G. A. Teller and C. E. Clark, displayed specimens of their goods.

E. Bement's Sons, Lansing, Mich., exhibited samples of the Bement Palace Steel Range, Palace Oak, Palace Regal Base Burner, Bement Huron Cast Range and Bement Acme Oak. They were represented by G. W. Bement, C. A. Gower, T. F. Bull and A. L. Curry. Souvenir memorandum books were distributed.

The Pittsburgh Plate Glass Company, represented by H. P. Robinson of Detroit and J. A. Knight of Co-



lumbus, exhibited their line of Patton's Sun Proof Paints, and also made a large display of Brushes. The company are now very large factors in the Paint and Brush trade. The sunflower button distributed by this company was almost universally worn by those in attendance at the convention.

The Reading Hardware Company, Reading, Pa., represented by W. R. Johnston, exhibited samples of their high grade Locks, Knobs and Escutcheons, and distributed souvenir Pin Trays.

The Joliet Stove Works, Joliet, Ill., represented by C. P. Thomson and C. F. Spicer, exhibited fine photographs of Moore's Airtight Heaters and Moore's Steel Ranges and Cooks. They also exhibited a new fire pot with sectional lining, having a hot blast arrangement to secure perfect combustion of soft coal slack in Moore's Airtight and Oak Stoves. The sections are vertical, enabling any of them to be quickly removed and replaced.

E. C. Atkins & Co., Indianapolis, Ind., ably represented by N. E. Cox, exhibited numerous samples of their line of Hand Saws and Saw Tools. Packs of playing cards of high grade were distributed as souvenirs.

The Columbian Enameling & Stamping Company, Terre Haute, Ind., represented by W. H. Pipp, Henry L. Pipp and J. W. Sleight, exhibited a fine array of samples of their Dresden and Amethyst lines of Enamelled Ware.

The Acme White Lead & Color Works, Detroit, Mich., exhibited samples of their Paints and Varnish, the company's representative being H. L. Wilson.

The Toledo Gas & Oil Burner Company, Toledo, Ohio, represented by T. F. Rockwell, secretary and manager, exhibited specimens of the Daniels Gas Burners for utilizing natural or artificial gas economically in all kinds of heating in residences and business establishments.

The Columbus Hardware Company, Columbus, successors to the Kilbourne-Jones Company, exhibited a large line of samples of the Reading Hardware Company's Builders' Hardware, and distributed souvenir Pin Trays. They were represented by Charles M. Luthy.

The Sherwin-Williams Company, Cleveland, Ohio, represented by Albert N. Merrill, L. J. Tasquelle and Edward S. Blanchard, made a very striking exhibit, including not only samples of the manner in which their Paint is put up, but also a great array of advertising circulars and posters. They favored their visitors with artistic cuff buttons, the company's trade-mark being admirably adapted for reproduction in this manner.

The Diamond Spiral Mfg. Company, Chicago, Ill., represented by William Scharf of Scharf & Nalde, general agents, 730 West Montrose avenue, Chicago, exhibited one of their new Diamond Spiral Washing Machines.

The Rollman Mfg. Company, Mount Joy, Pa., exhibited a number of specimens of the Rollman Food Chopper, and other specialties.

The White Lily Washer Company, Davenport, Iowa, represented by their Toledo branch house, exhibited one of their White Lily Washing Machines.

The J. H. & F. A. Sells Company, Columbus, represented by F. W. Woodward and E. L. Leonard, exhibited samples of Harness.

M. Hertenstein & Co., Columbus, exhibited samples of their new Royal hot blast air tight Radiator. This Stove has the body of an oak Stove, but it is fitted with a hot blast ring for the more perfect combustion of soft coal, and is covered with an ornamental cast iron

casing, built in sections, which can be instantly removed for blacking and as easily replaced. The nicked parts are also easily lifted off and replaced.

The Poste Bros. Buggy Company, Columbus, made an exhibit of four carriages of different models.

The New Jersey Wire Cloth Company, Trenton, N. J., were represented by Louis G. Beers and Charles McConnell, who distributed as a souvenir a spring Tape Measure in a celluloid case, bearing a reproduction of the Trenton monument, commemorative of the battle fought there December 26, 1776, during the Revolution.

The National Cash Register Company, Dayton, Ohio, represented by M. L. Lasley, distributed beautiful badges of the size and appearance of ten dollar gold pieces, bearing the representation of a Cash Register.

Smith Bros. Hardware Company, Columbus, were represented by O. L. Davis, treasurer, W. C. Jaynes, secretary, J. H. Smith and T. F. Smith, who distributed as a souvenir a spring Tape Measure in a celluloid case.

The Russell & Erwin Mfg. Company, N. Y., represented by W. R. Voorhees, distributed a pocket Screw Driver as a souvenir.

Among other manufacturers and jobbers represented at the convention were the following:

BOSS WASHING MACHINE COMPANY, Cincinnati, E. L. Enneking.

EDWARD FROHLICK GLASS COMPANY, Toledo, George L. Heaten, C. E. De Roug, B. C. Root and J. F. Richardson.

LOCKWOOD-TAYLOR HARDWARE COMPANY, Cleveland, J. Q. Riddle.

LAYMAN & CAREY COMPANY, Indianapolis, Ind., C. A. Pierson, F. Stone, A. J. Lewis and J. M. Lewis.

TAYLOR-BOGGIES FOUNDRY COMPANY, Cleveland, J. Willey Smith.

CHAMPION STEEL RANGE COMPANY, Mansfield, John Berger.

CLEVELAND TWIST DRILL COMPANY, Cleveland, H. G. Smith.

HEATH & MILLIGAN MFG. COMPANY, Chicago, D. F. Herne.

BROMWELL BRUSH & WIRE COMPANY, Cincinnati, A. B. Gatch.

SCHATT & MORGAN CUTLERY COMPANY, Titusville, Pa., Speer C. Nelson.

THE UNION SELLING COMPANY, distributors for the Standard Rope & Twine Company, New York, A. L. Sykes and V. D. Jenks.

COLE MFG. COMPANY, Chicago, N. W. Chaney.

LAMB WIRE FENCE COMPANY, Adrian, Mich.

ALLERTON, CLARKE COMPANY, New York.

AMERICAN STEEL & WIRE COMPANY, Chicago, Elwood and American Wire Fence Department, W. H. Kremer and S. F. Deems.

BUFFALO OIL, PAINT & VARNISH COMPANY, Buffalo, N. Y., A. C. Britton.

THE J. M. & L. A. OSBORN COMPANY, Cleveland, E. C. Howard.

BOYDELL BROS. WHITE LEAD & COLOR COMPANY, Detroit, Mich., H. F. Gibson.

GLOBE MFG. COMPANY, Taunton, Mass., who manufacture Wire Nails, Brads, Brass and Steel Escutcheon Pins, &c., have recently added a number of new machines and generally increased their facilities for producing special Nails. In their announcement they state that they make a specialty of Specialties; some of the more prominent of which are Needle Point and Machine Nails for special work, Upholsterers' Tacks and Bill Posters' Tacks. They also make patented articles to order.

## Colorado Retail Hardware Dealers' Association.

**P**URSUANT to requests from numerous Hardware dealers throughout the State, the Pueblo Hardware Dealers' Association issued a call for a meeting of Colorado Hardware dealers to occur February 16, at the Grand Hotel, Pueblo. About 50 merchants responded. The meeting was called to order at 2 p.m. by A. S. Ferguson, president of the Pueblo Hardware Dealers' Association, and upon motion A. L. Branson was elected temporary chairman and J. M. Killin temporary secretary.

Mr. Killin, on behalf of the Mayor of Pueblo, delivered an address of welcome to the delegates. Mr. Branson responded on behalf of the delegates, and thanked the Pueblo Hardware Dealers' Association, and especially Mr. Killin, for their efforts in bringing about the meeting.

On motion the chair appointed Messrs. Killin, Mayer and Moys a Committee on Constitution and By-Laws, with instructions to report at 4 p.m.

During the absence of the committee the assembly was addressed by numerous delegates along the line of



A. L. BRANSON, President.

proposed work and probable reforms to be fostered by the association.

At 4 p.m. the Committee on Constitution and By-Laws reported. On motion report was read and acted upon section by section, and after some amendments was adopted as follows:

### Constitution.

#### ARTICLE I.

##### NAME AND OBJECT.

Section 1. The name of this association shall be the Colorado Retail Hardware Dealers' Association.

Sec. 2. The object of this association shall be to promote the interests of and secure the friendly co-operation of its members.

#### ARTICLE II.

Section 1. Any person, firm or corporation in Colorado, engaged in the business of selling Hardware, and known and recognized as a regular retail Hardware dealer in good standing, may become a member of this association by subscribing to this constitution and paying the annual dues prescribed by the by-laws.

#### ARTICLE III.

##### OFFICERS.

Section 1. The officers of this association shall be president, vice-president, secretary and treasurer, and five members, who, with the president and secretary, shall constitute an Executive Committee.

Sec. 2. The president, vice-president and Executive Committee shall be elected annually by ballot and shall hold office until their successors have been elected and qualified.

Sec. 3. The secretary and treasurer shall be appointed or removed by the Executive Committee. The treasurer shall receive and disburse the funds of the association, under the direction of the Executive Committee, through a voucher signed by the president and secretary, keeping a careful account of the same. The secretary shall be under the direction of the Executive Committee, and his or her duties shall be assigned by them.

Sec. 4. The Executive Committee shall fix the salary of the secretary, and require bonds from the secretary and treasurer in any amount they may deem sufficient, to be approved by the president of the association; the fee of the bond company to be paid by the association.

Sec. 5. In case of a vacancy in any of the offices of this association, the same shall be filled by the Executive Committee until the next annual meeting. The Executive Committee shall perform the duties of an Auditing Committee, and examine the books of the treasurer and secretary and report their condition at the annual meeting of the association. A majority of the Executive Committee shall constitute a quorum for the transaction of business either by meeting or correspondence.

### ARTICLE IV.

Section 1. The regular meeting of the association shall be held annually on the third Monday of February, at such place as may be designated by the association at its previous annual meeting.

Sec. 2. The executive meeting is subject to the call of the president, or may be called by the written request of a majority of the Executive Committee.

Sec. 3. It shall be the duty of the president, or in case of his inability to serve, of the vice-president, to exercise supervisory control over the affairs of the association, and preside at all meetings of the Executive Committee, and to carry out and enforce all measures adopted by the association calculated to improve the condition of the Hardware business.

Sec. 4. The president shall appoint for each county one member, whose duty shall be to obtain membership in this association and encourage the formation of local associations.

Sec. 5. The presiding officer shall appoint at the annual meeting a sergeant-at-arms.

Sec. 6. Amendments to the constitution and by-laws may be made at any regular meeting by a vote of at least two-thirds of the membership present.

Sec. 7. All traveling Hardwaremen of Colorado who are in full sympathy with this association are eligible as honorary members on payment of \$3 for initiation fee and \$2 per year thereafter, but have no right to vote.

### By-Laws.

Article 1. The membership fee shall be \$5 and the annual dues \$3 for each year thereafter.

Article 2. Fifteen members shall constitute a quorum to transact business at any meeting.

Article 3. Each firm or corporation shall have one vote at any meeting of the association.

Article 4. All dues and fees must be paid before a person can be recognized as a member or become entitled to act in this association.

Article 5. The sergeant-at-arms shall guard the door and see that none but members be admitted, except by order of the presiding officer.

Article 6. Applications for membership in this association shall be made to the secretary, such application to be accompanied by the initiation fee. All applications shall be acted upon by the Executive Committee, and all such applicants favorably acted upon shall become members of this association.

### Resolutions.

The following resolutions were also reported:

*Resolved*, That we request the manufacturers and jobbers to confine the sale of their wares to the regular dealers.

That each and every member of this association use every possible effort to see that this request is complied with.

That if any manufacturer or jobber furnish goods to any one not regularly engaged in the retail trade, as defined in the constitution of this association, the dealers affected shall report the same to the Grievance Committee, with affidavits and other proper proof, who, after properly considering the same, shall instruct the secretary to correspond with the manufacturer or jobber and endeavor to adjust the matters; and in the event of a failure to so adjust a complaint, where the evidence is conclusive, the facts shall be presented to the members of the association.

*Resolved*, That we are heartily in favor of co-operating with the National Retail Hardware Dealers' Association.

*Resolved*, That a cordial invitation is hereby extended to all regular and legitimate Hardware dealers to join with us in this association, and that they send to the secretary the amount of dues for one year, and receive their certificate of membership.

On motion, the chair appointed a committee on credentials as follows: Messrs. Holcomb, Wallace, Priesters-



bach, Robie and Maxwell, with instructions to report at 7 p.m. The association then adjourned to meet at 7 p.m.

At the evening session the Credentials Committee reported in favor of admitting to active membership the following:

#### Active Members.

C. C. Huddleson, Lamar.  
Lamar Hardware Co., Lamar.  
G. S. Barnes & Son, Colorado Springs.  
Holcomb & Whitney, Castle Rock.  
Paul Frolich, Walsenburg.  
B. L. Van Vechten, La Jara.  
Gifford Hardware Co., Ft. Collins.  
Robie & McCutcheon, Greeley.  
F. C. Moys, Boulder.  
L. Graham & Co., Las Animas.  
W. D. Carroll, Antonito.  
John T. Clough, Colorado Springs.  
J. H. Linder & Co., Golden.  
Lowell-Meserve Hardware Co., Colorado Springs.  
Branson-Griswold Hardware Co., Trinidad.  
T. M. Harding Hardware Co., Canon City.  
Frank A. Ellis & Son, Denver.  
La Junta Hardware Co., La Junta.  
Andrus & Ferguson, Pueblo.

and to honorary membership the following:

#### Honorary Members.

E. W. Brown, Hendrie & Bolthoff Mfg. & Supply Company, Denver.  
J. L. Todd, Pueblo, representing Hibbard, Spencer, Bartlett & Co.  
J. H. Bardwell, McPhee & McGinnity Lumber Company, Hardware Department, Pueblo.  
Chas. M. Cameron, Denver Stove & Hardware Company, Denver.  
Newton Lumber Company, Hardware Department, Colorado Springs.  
Crews-Beggs Dry Goods Company, Hardware Department, Pueblo.  
Geo. Tritch, Geo. Tritch Hardware Company, Denver.  
T. H. Foley Lumber Company, Hardware Department, Pueblo.  
Fred. C. Voss, Brand Stove Company, Denver.  
Geo. Holmes, Holmes Hardware Company, Pueblo.  
J. M. Killin, J. M. Killin & Co., Pueblo.  
J. A. Edwards.  
W. S. Young, G. T. Sutterly & Co., Philadelphia.

After considerable discussion the association adjourned until the following morning.

#### TUESDAY MORNING SESSION.

On reassembling on Tuesday morning the report of Credentials Committee was again considered, and on motion was adopted so far as pertaining to those recommended for full membership.

A motion to proceed to permanent organization prevailed, and the chair was instructed to appoint a Nominating Committee of three. The chair appointed Messrs. Spriestersbach, Unfug and Gifford.

On motion Article III, Section 1 of the constitution was amended to read as follows:

The officers of this association shall be president, vice-president, secretary and treasurer and five members, two of whom shall be elected for two years and three for one year, who with the president and secretary shall constitute an Executive Committee.

#### Election of Officers.

The Nominating Committee reported nominations as follows:

PRESIDENT: A. L. Branson, Trinidad.  
VICE-PRESIDENT: T. M. Harding, Canon City.  
EXECUTIVE COMMITTEE FOR ONE YEAR: J. T. Wallace, Hooper;  
Jas. P. Barnes, Colorado Springs; I. H. Maxwell, Lamar.  
FOR TWO YEARS: Geo. E. Mayer, Denver; A. S. Ferguson, Pueblo.

On motion the report of committee was adopted, the committee discharged and the secretary instructed to cast the ballot for the above named gentlemen for officers and members of the Executive Committee.

On motion a resolution was adopted expressing the gratitude and thanks of the convention to the Pueblo Hardware Dealers' Association for its work in behalf of the Hardware dealers assembled.

On motion the following resolution was adopted and the secretary instructed to send a copy of same to Governor James H. Peabody, Speaker Sanford and President of the Senate Haggott, of the General Assembly of Colorado:

Whereas, Our General Assembly has passed on third reading, Senate bill No. 52 and House bill No. 34, amending the State law regarding exemptions, and the same is now up to the Governor to approve or reject it; it is hereby

Resolved, That the Colorado Retail Hardware Dealers' Association in convention assembled hereby express its appreciation of the action in this connection of our legislators, and respectfully request Governor James H. Peabody to approve these bills that same may become a law.

At this time point of order was raised that Mr. Killin was not eligible to act as temporary secretary of permanent organization, as he was not admitted to full membership. On motion the chair appointed F. C. Moys as temporary secretary.

The chair appointed Messrs. Ellis, Brown and Barnes as a committee on resolutions.

On motion the list recommended by Credentials Committee for honorary membership was adopted.

Motion prevailed that Article IV, Section 7, of Constitution be amended to read as follows:

All wholesale firms or corporations or Hardware travelling men who are residents of Colorado be entitled to honorary membership upon payment of same mem-



F. C. MOYS, Secretary-Treasurer.

bership fees and dues as other members, but are not entitled to vote.

Motion prevailed that Constitution and By-laws and Resolutions as reported by committee and amended be adopted.

Motion prevailed that Executive Committee be authorized to make application for membership in National Retail Hardware Dealers' Association and provide for attendance of delegate or delegates at convention of same which meets in Chicago, March 17 to 19.

Motion prevailed that membership fee and yearly dues include per capita tax of 75 cents for membership in National Association.

#### Committee on Resolutions

reported as follows:

Resolved, That the thanks of this association are hereby tendered to the Pueblo Retail Hardware Dealers and to their efficient secretary, J. M. Killin, for the very generous and courteous reception they have extended to the visiting delegates from all parts of the State. It is the belief of your committee that the usefulness of this State Association will be largely promoted and the friendship of its members cemented by the example that has been offered by the gentlemen of Pueblo.

On motion the report was adopted by a rising vote.

Motion prevailed that all members use all honorable means to assist the State Game Warden in the discharge of his duties.

A recess was ordered by the chair to permit the Executive Committee to organize and appoint a secretary and treasurer.

Upon reassembling President Branson announced that the Executive Committee had appointed F. C. Moys secretary and treasurer.

Motion to leave selection of next meeting place to Executive Committee was ruled out of order. Motion prevailed that when the convention adjourned it be to meet some time during June, July or August (exact date to be left to the Executive Committee) in Colorado Springs, and that the next annual meeting be held in Denver.

A motion to invite the Hardware dealers of New Mexico to join the association was lost.

Remarks were made by several indicating that the sense of the meeting was that each member should push such goods as are not sold through catalogue houses and favor in every way possible such manufacturers and jobbers as refuse to sell catalogue houses and confine their sales to legitimate retail Hardware dealers.

Mr. Killin reported there had not been enough receipts for tickets to entitle members to round trip railroad rate of one and one-fifth fare and requested members to take receipts for return fare and return to him and he would endeavor to get a refund from the railroad companies.

A motion that the State Association bear the expense of the Pueblo dealers in bringing about the meeting was lost, the chair ruling the same out of order at the request of Mr. Killin on behalf of the Pueblo Association. The meeting then adjourned.

#### Entertainment.

The visiting delegates were royally entertained by the Pueblo dealers. The itinerary included an evening at the theater and one at the Rover Athletic Club, as well as a trip through the steel works of the Colorado Fuel & Iron Company.

#### PRICE-LISTS, CIRCULARS, &c.

CHANDLER & FARQUHAR, Boston, Mass.: Illustrated catalogue No. 100, of Tools and Supplies for machinists, blacksmiths, amateurs and all classes of metal workers. The catalogue, under date of March, 1903, contains 197 pages, and is very complete in the lines to which it is devoted.

THE D. M. STEWARD MFG. COMPANY, Chattanooga, Tenn.: Descriptive and illustrated price-list of metal workers' Crayons and Pencils. This line of Crayons has been built up and perfected by continuous experience since 1876. The Crayons are referred to as full size, packed in strong lockcorner slide cover wood boxes and shipped in uniform cases made from clear lumber.

THE STAR BAKER COMPANY, Bellville, Ohio: Circular illustrating and describing the Columbia Roaster and Baker.

THE AMERICAN TAP & DIE COMPANY, Greenfield, Mass.: Fine Machine Relieved Taps. A price-list just issued illustrates Machine Screw Taps, Machinists' Hand Taps and Machine Nut Taps.

F. E. MYERS & BRO., Ashland, Ohio: Catalogues illustrating Myers' Pumps, Hay Tools, &c. To each of these lines a separate catalogue is devoted, showing a large variety of patterns and styles.

THE KERN INCANDESCENT GAS LIGHT COMPANY, New York: Illustrated catalogue devoted to the Kern Inside and Outside Arc Lights.

THE ASHTABULA TOOL COMPANY, Ashtabula, Ohio: Catalogue devoted to the illustration and description of Forks, Rakes and Hoes.

THE HESS SPRING & AXLE COMPANY, Carthage, Ohio: Catalogue illustrating the company's Springs and Axles, including their "Naked" or "Bike" Axles.

THE MALIN COMPANY, Cleveland, Ohio: Printed matter relating to Music Wire for fine Springs, Insulated Wire and Composition Wire Belt Lacing on spools, Belt Markers, Groovers and Punches and Cutting Pliers. A Belt Lacing Outfit is offered, consisting of a well finished, brass trimmed wooden case containing an assort-

ment of eight 50-foot spools of the above Lacing and a complete set of tools for use in applying it.

THE OHIO BALE TIE COMPANY, Cleveland, Ohio: Calendar for 1903, with reference to the company's Steel Wire Bale Ties, Wire, &c.

THE SIMMONS HARDWARE COMPANY, St. Louis, Mo.: Catalogue No. 439, of Fishing Tackle, Baseball, Tennis, Golf Goods, &c. Also catalogue No. 436 relating to Laclede Bicycles for 1903.

CHATTANOOGA IMPLEMENT & MFG. COMPANY, East Chattanooga, Tenn.: Catalogue devoted to Mallory's All Steel Adjustable Combination Perfection Plow. The company are now completing extensions and improvements on their plant.

THE MIDGLEY MFG. COMPANY, Columbus, Ohio: Automobile Tubular Steel Wheels, artillery pattern, are illustrated and described in a catalogue, with illustrations and names of various automobiles equipped with these Wheels.

NATIONAL CASH REGISTER COMPANY, Dayton, Ohio: An attractive illustrated and descriptive catalogue of National Cash Registers adapted to United States currency. A number of colored illustrations are presented showing styles of finish.

T. H. CHUBB ROD COMPANY, Post Mills, Vt.: An attractive catalogue of Fishing Rods and Anglers' Supplies. The catalogue contains 116 pages, fully illustrating the lines of goods to which it relates.

FOSTER-RICHARDSON COMPANY, Westboro, Mass.: Illustrated catalogue relating to Metal Bedsteads, of which a large variety of patterns are shown.

THE DEERLICK OIL STONE COMPANY, Chagrin Falls, Ohio: Catalogue illustrating Deerlick, Washita, Arkansas, Hindostan and Orange Oil Stones, Scythe Stones, Razor Hones, &c.

THE COLUMBUS BUGGY COMPANY, Columbus, Ohio: Illustrated catalogue relating to a large assortment of Buggies and Carriages.

THE A. J. JORDAN CUTLERY COMPANY, with works at Sheffield, England, and American sales room at St. Louis: Pamphlet illustrating the various varieties and types of their "AaA1" Knives.

ALDER & BOYD, 37 Warren street, New York, manufacturers' export representatives: Illustrated pamphlet catalogue of 57 pages, 9 x 12 inches, containing goods suitable for export and designed for circulation among buyers for foreign trade. Lists, discounts and net prices are printed in the body of the book.

SARGENT & CO., New Haven, Conn., and 149-153 Leonard street, New York: Illustrated catalogue of Wire Screen Hardware and spring and summer goods for the coming season, containing 90 pages, each 9 x 12 inches, with an accompanying discount sheet. It includes such goods as Catches, Bolts, Latches, Corner Brackets, Springs and Spring Hinges, Butts, Buttons, Pulls, Knobs, Lifts, Door Holders, Hooks and kindred articles in great variety.

#### GEORGE BORGFELDT & CO.

GEORGE BORGFELDT & CO., Wooster street, from Third to Fourth streets, New York, have issued a 36-page brochure, profusely illustrated, showing in detail views of parts of the 11 floors, basement and annex, in a part of which are exhibited samples of great varieties of goods, 155,000 square feet of floor space alone being devoted to samples. Among the goods the firm deal in, both foreign and domestic, are House Furnishing Goods, Cutlery, musical goods, harmonicas, school supplies, stationery sundries, dolls and toys, china and glass ware, bric-a-brac, rich cut glass, fancy goods, druggists' sundries, notions, small wares, Japanese goods, American fancy goods, Oriental rugs and tapestries. On the front page, to show the growth and expansion of the business, are illustrated the five different buildings occupied from 1881 to the present 12 floored building, a block long. The company are capitalized at \$1,250,000 and have three branches in the United States, one in Canada and 11 in Europe.



## California State Retail Hardware Association.

**T**HE second annual convention of the California State Retail Hardware Association was held at the California Hotel, San Francisco, on Thursday, Friday and Saturday, January 22, 23 and 24. The convention was called to order on Thursday morning at 10.45 o'clock by the president, O. F. Sites, of the Palace Hardware Company, San Francisco. Johnson Grover of Colusa was appointed sergeant-at-arms.

### Members Present.

The roll call showed the following members present:

Theo. Turner, Turner Hardware Company, Modesto.  
 John C. White, White, Cooley & Cutts, Marysville.  
 C. E. Kocher, Merced  
 Chas. W. Barrett, Barrett, Hicks & Co., Fresno.  
 H. F. Winnes, Reedley.  
 A. D. Cutts, White, Cooley & Cutts, Marysville.  
 Chas. Kaufmann, Kaufmann Bros., Corning.  
 John Haenny, Lincoln.  
 Oscar C. Schulze, Eppinger & Co., Dixon.  
 R. O. Kimbrough, Sacramento.  
 J. T. Brown, Rio Vista.  
 Ed. J. Carter, Cottonwood.  
 C. J. McBride, Lincoln.  
 W. E. Hawkins, Ager.  
 E. F. Reichman, Fort Jones.  
 R. B. Cranston, Woodland.  
 J. M. Hadley, Geo. E. Turner, Nevada City.  
 John P. Maxwell, Oakland.  
 F. Bancroft, Madera.  
 Frank Rittigstein, A. Rittigstein & Co., Oakland.  
 J. A. Murray, Woodland.  
 G. A. Chappell, Brown & Chappell, Gilroy.  
 Chas. A. Ricketts, San Luis Obispo.  
 W. T. Cook, Arroyo Grande.  
 H. E. Robinson, Robinson Hardware Company, Gilroy.  
 C. A. Bennett, Bennett Bros., San Francisco.  
 T. M. Cameron, Hanford.  
 L. O. Johnson, Arbuckle.  
 E. T. Bryant, Bryant & Trott, Santa Maria.  
 L. J. Klemmer, Estate J. P. Klemmer, Willows.  
 C. M. Brown, Brown & Chappell, Hollister.  
 Wm. Earll, Hubbard & Earll, Chico.  
 George M. Hickman, San Francisco.  
 Wm. F. Lutz, Wm. F. Lutz Company, Santa Ana.  
 J. D. Keys, C. Sleber & Co., Woodland.  
 J. W. Williams, Hochheimer & Co., Willows.  
 Joseph I. Lawless, Joost Bros., San Francisco.  
 Peter A. Smith, San Francisco.  
 John Simpson, Tehama.  
 Jno. W. Baxter, J. A. Baxter Company, Watsonville.  
 J. Grover, Colusa.  
 Robert W. Boyd, Hampton Hardware Company, Marysville.  
 A. L. Nichols, Nichols Hardware Company, Chico.  
 A. F. Brady, Brady & Cassidy, Grass Valley.  
 Elam Biggs, Elam Biggs Hardware Company, Grass Valley.  
 Geo. C. Garrett, Lyon & Garrett, Red Bluff.  
 Roy Hall, Kelldsen-Hall Implement Company, Fresno.  
 O. F. Sites, Palace Hardware Company, San Francisco.  
 A. Bancroft, Merced.  
 E. Jones, Alexander, Yost & Co., San Francisco.  
 B. C. Brown, C. Brown & Sons, San Francisco.  
 E. A. Eaton, Ford & Sanborn, Salinas.  
 W. M. Doty, Biggs.  
 Henry Gracey, San Francisco.  
 G. A. Gutman, Hochheimer & Co., Germantown.  
 L. H. Kohn, San Francisco.  
 S. J. Dean, San Francisco.  
 M. L. Mehan, Placerville.  
 S. V. Armstrong, Philpott & Armstrong, San Francisco.  
 M. M. Brown, Chas. Brown & Son, San Francisco.

The proceedings of the first annual convention having been printed in pamphlet form through the courtesy of *The Iron Age*, and distributed throughout the membership of the State Association, reading of minutes was, on motion, dispensed with.

The president announced receipt of a communication from the Alameda County Retail Hardware Association asking for affiliation with the State Association, and by a resolution unanimously adopted the association was admitted into full fellowship with the State body.

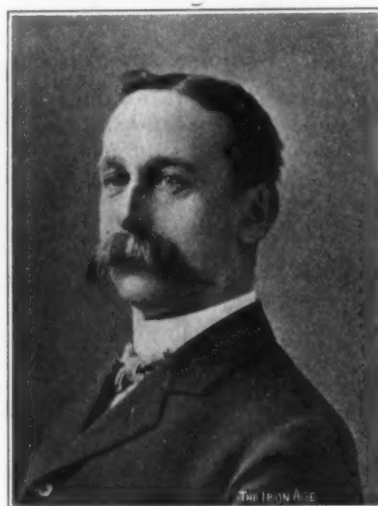
The president then appointed an Auditing Committee, consisting of Robert W. Boyd of the Pacific Retail Hardware Association and J. W. Baxter of the Central California Retail Hardware Association, to audit the ac-

counts of the secretary and treasurer, after which adjournment was taken until 1 p.m.

### THURSDAY AFTERNOON SESSION.

The association reassembled at 1.30, when the president made the following explanation:

Many members of the association have inquired why the meeting of the convention was changed from March to January. As the Pacific Retail Hardware Association was to hold its annual session in San Francisco in January, we were asked by them if the various organizations would not consent to the State convention being held immediately after theirs, so that the gentlemen from the northern association would not have to make a second trip to San Francisco. To be brief, a communication was sent to every member of the State Executive Committee asking their consent to this change, and as



O. F. SITES, Ex-President.

every member of that committee reported favorably the change was made.

Another question was also submitted and granted, to wit: That Section 2 of Article 2 constitution and by-laws, referring to delegates, be for this meeting suspended. Therefore, every member attending this convention is a voting member, and entitled to vote on any questions that may come up.

### President's Address.

President Sites then delivered his annual address, as follows:

In looking over the work accomplished during the past year, I feel that we have reason for congratulation and that we can find grounds for comfort; I always like to find those first. At our meeting in 1902 we had a membership of 190 upon whom the per capitax tax had been paid. This membership was distributed as follows:

	Members.
Pacific Association.....	64
San Francisco Association.....	40
Central Association.....	25
San Joaquin Association.....	35
Southern Association.....	35

A great deal of effort was put forth in the early part of 1902 to strengthen the membership. That seemed to be the point to which all the associations were working, and when the last call was made on our secretary for counts from the different rosters, we were very much pleased to find that there had been a good healthy growth. The growth has been as follows: The Pacific showed up with the same membership as before. The

San Francisco showed an increase of seven members. The Central showed the same number of members. The San Joaquin had grown to 49, the Southern Association to 89 and the Alameda County Association, the infant, responds with a membership of 10, making a total enrollment of 284, a gain of 85 members.

Several of the local associations have used the State Association very effectively. There have arisen several matters of import, which they did not seem able to handle themselves. They appealed them to us, and, without any undue flourish of trumpets or display of banners, most of the difficulties have been quietly adjusted to the satisfaction of the parties interested.

With a thoroughly equipped State organization we are placed in line for

#### AFFILIATION WITH THE NATIONAL ASSOCIATION.

With this step accomplished our strength would be augmented by their 3500 or 4000 members, and with an



WM. F. LUTZ, Vice-President.

Intelligent wideawake Executive Committee at the other end of the line ready to render us any needed assistance.

In conclusion, I want to make an appeal for greater loyalty to the principles of the association. Without loyalty we can do nothing; with loyalty we can do much; we must lose sight of self to a great extent; be just as willing to help our brother in the uttermost confines of California and work as hard and diligently for him as we would ask the association to work for us. Your officers have done their work cheerfully and tried to do it honestly as men should. We want a closer fellowship.

#### Secretary's Report.

The secretary, Henry Gracey, read his report as follows:

We are here to-day at the close of our second year as an association surrounded by conditions which require our undivided attention, strength and affiliation. You are not here to listen to a detailed report of the daily transactions occupying the attention of your secretary, but I take it that the members of the association desire to know, in a general way, what is being accomplished by the organizations in keeping with the object as stated in the constitution and by-laws, which you remember is, "To be brought into closer sympathy one with the other as retailers." We have at frequent intervals conferred personally and by letter with the members of our association, regarding subjects which from time to time have been presented. Occasions have presented themselves, however, during the year, where with a personal visit of our president or secretary, great good could have been accomplished, whereby not only our State roster might

have been swelled, but wrongs righted and a better understanding as regards our State obligations and requirements.

But our financial condition was such as to make it impossible to carry on a work which has been constantly handicapped for the lack of funds. On February 15, 1901, our State Association was organized with 98 members. On March 10, 1902, we had 202 members. At this, our second annual convention, our State roster shows a membership of 284, showing a

#### GAIN OF NEARLY 300 PER CENT.

in two years. A per capita tax of \$1.50 on 300 members amounting to \$450 up to the present time, is the amount we have had to carry on our State work for two entire years. A per capita tax of \$5 per member per year, making a total of \$1500, would have put us entirely out of debt, after paying a much needed organizer, the expenses of a secretary and the cost of making an occasional visit to our local associations by our State executive officers, to the betterment of our State organization.

If we had no other object in view beyond bringing together once a year the same gentlemen who would attend these retailers' conventions in any event, and having our house warming and programme, and feeling that we have risen above the fellow who thinks there is nothing to learn from personal contact with those who are engaged in the same line of business as himself, it is our idea that it is well worth \$10 apiece to be able to attend these conventions as a delegate or member of an association rather than an outsider.

I feel a pardonable enthusiasm in the work of this association and in my connection with it, which can only be experienced by one handling its correspondence. During the past year we have had correspondence from all over the country, asking for information in regard to the State work, also advice in regard to association matters too numerous to mention. We have been written up at various times by nearly every kindred paper in the world of any importance.

#### OUR EXECUTIVE COMMITTEE

have spent considerable time and money gratuitously in the careful consideration of many important matters, threshing out for discussion at these meetings only such matters as may be successfully acted upon by this association. It is your secretary's opinion that a membership in an association which would cost the moderate sum of \$10 per member per year to defray its necessary expenses, which makes no demands upon the time of its members other than an occasional "yes or no" vote upon the expediency of any actions suggested by its Executive Committee, and which makes far closer relations not only between retailer and retailer, but between retailer and jobber, and jobber and manufacturer engaged in the same line of business, through bringing them together once a year for a friendly discussion of business interests held in common, should appeal to every Hardware dealer in the United States as desirable.

Our esteemed president has been both able and willing to guide our work during the year. We know, personally, to the detriment of his personal affairs, he has not only spent time, but money gratuitously for the betterment of this association, and we wish publicly to extend him thanks for his very courteous treatment and guidance.

Our association has grown, I think, beyond the hopes expressed at our first meeting, and our first year closed with all expenses paid. We are well advertised, and compared with similar organizations we have the best article on the market for the price, and I believe that in nine cases out of ten it can be placed with a ten-minute explanation, but it is an article which cannot be as successfully presented by letter as by personal interview.

#### Treasurer's Report.

The treasurer's report was as follows:

Received during the year, as per capita tax of \$1.50 on 202 members.....	\$303.00
Balance carried over from last year.....	4.55
Total .....	\$307.55
Total expenditures to date.....	348.30
Total indebtedness to date.....	\$40.75



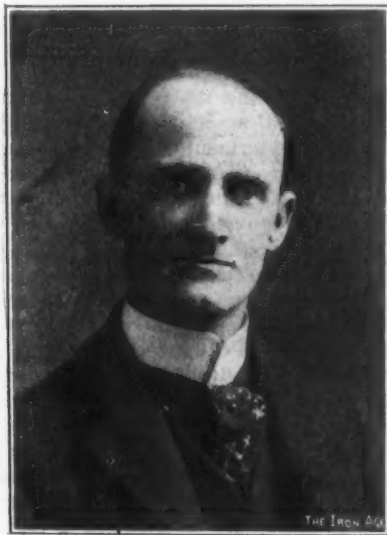
## California Hardware Association.

### Report of Executive Committee.

Following was the report of the Executive Committee:

Your Executive Committee, appointed at our last meeting, and to whom was delegated and intrusted various matters for adjustment, beg leave to submit, at our second annual meeting, the following report:

It will be remembered that upon the conclusion of our labors at the last meeting, the question of classification and differentials was in an unsettled and unsatis-



HENRY GRACEY, Secretary.

factory condition, and that after a conference with the wholesalers, who had been unable and unsuccessful in arranging their differences, a committee was appointed to take this matter up and endeavor to bring about a restoration of the previous conditions. This committee, consisting of Messrs. Eaton, White, Lathrop, Barrett and Ellis, immediately upon the adjournment of our convention took the matter in charge, and are to be congratulated upon the successful conclusion of their efforts, resulting, as it did, in the re-establishment of all previous schedules, and producing harmony and good feeling, instead of discord and possibly disruption.

On Monday and Tuesday, May 5 and 6, 1902, your committee met at the Palace Hotel, San Francisco, all of the members being present, with the exception of Messrs. Barrett, Baxter and Dawe. The president announced that this meeting was called for the purpose of disposing of such items of business as were referred to it for action at our recent State convention, and for the consideration of any other matters that might be presented. The communication from the publisher of the *Pacific Hardware Journal*, received and read at our last meeting, was read by Secretary Gracey, and, after discussion, said journal was adopted as the official organ of the California State Retail Hardware Association. Secretary Gracey was also instructed to acquaint the secretaries of the several local associations of this action, at the same time requesting them to notify each individual member of their respective associations, and asking them to lend their assistance to this journal by subscribing for it.

The communication from the Texas Hardware Jobbers' Association, being read by the secretary, by order of the president, the questions numbered 1, 2, 3 and 4 were taken up in the following order:

#### QUESTION 1.

Are you using all the means at your command to eliminate as far as possible the practice of reputable manufacturers selling or permitting their goods to be catalogued by catalogue houses?

It was suggested that in reference to this question, our State Association having been in existence but a

short time, and having other numerous matters of importance to consider, and not knowing exactly what method to pursue in taking up this matter, they request information from the Texas association as to the lines on which they were working.

#### QUESTION 2.

Do you favor the present burden on the merchant of 2 cents postage being continued, in order to meet the deficit of the Postal Department occasioned by the wide distribution of second-class matter?

The Executive Committee answer, "We do."

#### QUESTION 3.

Are you fighting the Parcels Post bill, a measure calculated to tear down the retail trade and build up the department stores and catalogue houses?

In regard to this question, it was suggested that a letter on the following lines be written by the secretary:

At the annual meeting of the Pacific Retail Hardware Association, held two years ago, strong resolutions were adopted against the bill, which were sent to our representatives in Congress. We also received the report of the wholesalers in reference to this matter, and we were informed about a year ago that the bill had been killed in the committee. If our information is not correct, kindly advise us and we will again take the matter up.

#### QUESTION 4.

Are you sitting quietly by and letting the express agent in your town act as agent for catalogue houses and department stores?

One or two instances having been cited where this was being done within our State, Secretary Gracey was instructed to write a letter to Wells, Fargo & Co., requesting an interview. Correspondence resulted in an appointment with the manager of Wells, Fargo & Co. for Wednesday afternoon, May 7, at which time Messrs. Gutman, Brown, Armstrong and Sites were granted an audience. Manager Christenson assured your committee that practices of this character were not in accord with the policy of the company, and that any case brought to his notice, where any agent employed exclusively to attend to the company's business was concerned, would be gladly investigated with a view to its



JAMES W. HELLMAN, Executive Committee.

discontinuance. Action on the cases cited was immediately taken up by him.

#### STATE ORGANIZER.

In reference to the advisability of employing a State organizer, our discussion resulted in instructing our secretary to send a letter to the secretary of each local association throughout the State in regard to soliciting subscriptions for such an organizer. The following letter was submitted:

SAN FRANCISCO, May 5, 1902.

At our last annual meeting the question of more complete and thorough organization was taken up, and it was the consensus of opinion that the employment of an organizer for the purpose of increasing the member-

ship be left to the discretion and action of our Executive Committee. The Executive Committee now in session has decided and deemed it advisable to employ such an organizer, and it will be necessary to raise a sufficient fund for that purpose. It will be his duty to travel and visit the various retail Hardware dealers throughout the State who at the present time are not connected with any association, and generally to promote the objects of the association.

In view of the fact that some firms do a larger business than others, and consequently receive proportionate benefits from the association, it was decided that the secretary of each association should address a letter set-



JOHN C. WHITE, Executive Committee.

ting forth these facts, and to request each firm to state how much they are prepared to subscribe to said fund. These subscriptions should be based on the amount of business done, and the consequent benefits received by the firm. We would suggest that each secretary make out a list of the entire membership of his association, with a subscription blank, which are to be forwarded to each of the members in rotation; the list of membership to accompany the letter and subscription blank, so that each member upon receiving same will at once see to whom it shall be forwarded next in order.

The secretary should also accompany these papers with a personal letter to all members, asking as large a contribution as is consistent with their interests, and also advising them to remit immediately the amount of their subscription, to be sent to the secretary of the local association. The secretaries of the various associations, after receiving the entire subscription, will immediately forward the same to my address at San Francisco. We trust that this matter will meet with a hearty and immediate response.

Yours very truly,

HENRY GRACEY.

#### BUILDERS' HARDWARE.

The next matter to occupy our attention was the retailing of Builders' Hardware by wholesalers. On Tuesday morning we met the representatives of the wholesale houses, and the matter was opened by the president with the following remarks:

We requested your presence this morning to meet our State Executive Committee, because among the many communications received from our several local associations at our recent State convention, and referred to us for action, was one from the San Francisco and Oakland Association, pertinent to the retailing of Builders' Hardware in this city, and calling our attention to the very unsatisfactory condition now existing in this branch of the Hardware trade. The object of this conference is, therefore, to determine if there be not some method by which this grievance can be eliminated and the condition improved. The subject was discussed at great length, but owing to the absence from the city of A. L. Scott it was on motion finally decided that a subcommittee of three, consisting of the president and two others, should meet with Mr. Scott and the other members of the Pacific Hardware & Steel Company, together with the representatives from Baker & Hamilton and Dunham, Carrigan & Hayden Company on Mr. Scott's return from the East, and again take this matter up. The president selected S. V. Armstrong and G. A. Gutman as his associates on this subcommittee.

#### STOVES AND HOUSE FURNISHING GOODS.

The amended resolution, which was submitted by the San Francisco and Oakland Association, adopted and referred to the Executive Committee, was read by President Sites, who asked the committee their pleasure in regard to it. On motion, duly carried, a committee of five was appointed to interview the wholesalers and jobbers in Stoves, Kitchen Utensils and Kindred Ware, in reference to the resolution, as follows: Messrs. Eaton, Gracey, Nichols, White and Brown. They met by appointment at Anvil Hall on Tuesday, May 6, representatives of the following firms being present: Weister & Co., Sells Bros. & Co., Harry Unna Company, George H. Tay Company, W. W. Montague & Co., Dunham, Carrigan & Hayden Company, Holbrook, Merrill & Stetson and Pacific Hardware & Steel Company.

The conditions, as existing at the present time, were fully discussed, and it is the impression of your committee that many improvements can be made. We have the assurances of several representatives of the Stove and Tinware chapter that they are fully in accord with the movement and will render every assistance possible. In consideration of the demands made upon them by the Retail Association, the wholesalers have asked for certain concessions from the retailers, which we are not prepared to reply to or extend until more fully conversant with the attitude of our individual members; and it is the sense of this body before proceeding further in this matter that we get an expression of opinion from the various individual members of this association as to whether they are willing to abide by and indorse any and all agreements and arrangements entered into by the State Executive Committee with the wholesalers in the various branches enumerated above.

We would further add, that with assurances of the support of the members much good can be accomplished, and that we can secure the consent of the wholesalers to withdraw from the retail business. So many pointed interrogations have been propounded that we cannot impress too strongly upon the minds of the individual mem-



G. A. JOHNSON, Executive Committee.

bers of this association the importance of concerted action on their part.

Secretary Gracey was, on motion, instructed to immediately correspond with the secretary of each local association on these lines, requesting that he, in turn, communicate with each member of his association, asking for such expression of opinion, replies to be forwarded to State Secretary Gracey at the earliest possible moment.

The following resolutions were unanimously adopted:

*Resolved*, That the next annual convention of the California State Retail Hardware Association be held in San



## California Hardware Association.

Francisco, commencing on the second Monday in March, 1903.

*Resolved*, That only the transportation expenses be paid to members of the Executive Committee in attendance at this meeting.

*Resolved*, That a salary of \$25 per month, dating from the organization of this association, which was March 15, 1901, be paid the secretary of the association.

*Resolved*, That these proceedings be printed and copies forwarded to each secretary of local associations, and that he, in turn, send a copy to each member of his association.

### WAGONS AND IMPLEMENTS.

We are informed that the important matter brought to the attention of Baker & Hamilton by Mr. Lutz of



CHAS. W. BARRETT, Executive Committee.

Santa Ana, relating to Wagons and Implements, is progressing satisfactorily, and we look forward with confidence to a final adjustment of the grievance.

### BUILDERS' HARDWARE AGAIN.

On June 26, 1902, the committee to again confer with the wholesalers in reference to the retailing of Builders' Hardware, met at the Palace Hotel, and after a long and extended conference no conclusion was arrived at, and while it probably promoted a somewhat better feeling among the parties at interest, we must candidly acknowledge that our efforts were fruitless, and that the Builders' Hardware business in San Francisco and Oakland is still in the same deplorable and unsatisfactory condition as in the past.

### RETAILING BY WHOLESALERS.

We have referred to our conference with the wholesalers regarding the retailing by them of Stoves, Tinware, &c., and of certain concessions asked by them, which at the time we were not in a position to concede or grant, until we could be fully advised by our members as to their position and wishes. Our secretary corresponded with every member of this State on this most important matter, receiving replies from 75 per cent. of the membership pledging their support and willingness to stand by and accept all of the acts of the State Executive Committee. From the other 25 per cent. no answers were received.

We believe that these two questions, in fact, the retailing of any line by the wholesalers should be taken up by our association in convention assembled, and some positive action taken tending to a discontinuance of this illegitimate and unfair policy. Since the formation of our local associations we have succeeded in eliminating many of the grievances and abuses which we have long endured in return for which we have materially reduced our Eastern purchases. The exaction of promises on our part looking to an extension of this reduction is not warranted, believing as we do that the channels of dis-

tribution by the wholesalers and retailers are plainly and thoroughly marked. It is our firm conviction that an abatement of this policy of retailing by wholesalers, a policy which does not pertain to any line of merchandise excepting Hardware, would without any assurances or promises from the retailers, result very quickly in the minimizing of Eastern purchases, providing, of course, that prices were, we will not say equal, but nearly so.

### INSUFFICIENCY OF FUNDS.

The method adopted by our committee for the purpose of raising funds for the employment of an organizer has probably not met with your approval, at least, such is our impression judging from your failure to respond. We have concluded, therefore, to refer this matter to the convention, trusting that some satisfactory arrangement for the collection of a sufficient sum may be arrived at. Our convention has labored under a most decided disadvantage on account of the insufficiency of funds in the treasury, and some steps should be taken to provide a fund that will be ample to meet all the requirements. We received an invitation to attend some of the annual meetings of the local associations, and our president was also invited to visit the Southern California Association to enlighten them as to the workings and methods employed by the older associations, but a lack of funds in the treasury prohibited these visits. In giving their time and attention to committee work, very frequently to the detriment of their private affairs, is all that should be required, but each and every one of the committee has not only done this, but has borne his portion of the expenses without complaint. We mention these facts to impress upon the membership the importance of supplying all future committees with the necessary funds to transact all business of the association that may come before them without any pecuniary loss to themselves.

We congratulate the association upon the

### SMALL NUMBER OF GRIEVANCES

that were called to the attention of our committee, and we believe, with the exception of a few minor instances, that the classification and differentials have been rigidly adhered to. The minor instances and the few grievances were satisfactorily adjusted by our president and secre-



E. A. EATON, Executive Committee.

tary without the assistance of the balance of the committee. The date of this annual meeting was changed to Thursday, January 22, 1903.

From various sources, we are in receipt of information showing the deep interest manifested by all the Hardware dealers in our association work, and their loyalty to the State Association, which is recognized as the fountain head for all matters impossible of adjustment by the respective local associations.

### WE DESIRE TO EXTEND THANKS

to the traveling men of the several Hardware houses in the State for the able assistance they have rendered us

in advocating the principles and aims of our association, and by that means increasing our membership. And we also extend our thanks to the *Pacific Hardware Journal* and *The Iron Age* for the publication of the proceedings at our last meeting, and we urge and recommend that it is to the interest and welfare of every wideawake dealer that he not only be a subscriber to these two journals, but that he take sufficient time to read them thoroughly from beginning to end.

#### INFLUENCE OF THE ASSOCIATION.

The year just passed has been one of the most prosperous in the history of the country, and the activity and progress in the line of building has been most marked all over the United States. We feel confident that we have all had a bountiful share of that prosperity, and it is our conviction and firm opinion that the present year will be a repetition of the last, and in all probabilities will exceed it in the volume of business. Our association has been a large factor in putting the retail Hardware business on a profitable basis, not only on account of the numerous abuses that we have been instrumental in abating, with the assistance of the wholesalers, but more particularly on account of its efforts in bringing about a discontinuance of the aggressive and senseless competition among ourselves that had formerly been in vogue and seemed likely to continue.

We trust there will be no apathy or falling off in your interest and loyalty to your representative associations and to the State Association, and that the present year will show a marked and vigorous growth in our membership:

O. F. SITES,  
G. A. GUTMAN,  
HENRY GRACEY,  
JOHN C. WHITE,  
A. L. NICHOLS,  
CHAS. W. BARRETT,  
THEO. TURNER,  
JNO. W. BAXTER,  
WM. F. LUTZ,  
S. V. ARMSTRONG,  
M. M. BROWN.

#### Report of Auditing Committee.

The Auditing Committee reported as follows:

Your Auditing Committee, after having carefully examined the books and accounts of the treasurer and secretary, begs to report that it finds the same to be correct in every particular.

On motion duly made and carried, the several reports were ordered accepted and placed on file.

#### Addresses by Representatives of Local Associations.

John C. White, president of the Pacific Retail Hardware Association, spoke of the harmony which prevailed at their fifth annual meeting, held in San Francisco, on January 21, and of their satisfaction with the differentials and classification which had been adopted. He reported that his association had made considerable progress; that the Wagon Agreement was in full force and effect with them in the northern part of the State; that they conferred with the manufacturers' agents or representatives in San Francisco and agreed with them on the price of each specific article, and then added the freight and cartage to their point of destination, thus making the price. This method had been very well maintained all over the Sacramento Valley, and seemed to his association to be the only solution of the difficulties. Mr. White remarked that various implements, such as Mowers, Rakes, Harrows, Plows, &c., had different values, and he could not say that the same price could be maintained or extended all over the State. He advocated that all agree with headquarters as to what shall be the retail price, and then adopt that price, plus the freight to the respective point. This method had worked well in his district. There had been several disruptions on the question of Wire Nails, but the difficulties had been taken up by the proper authorities, and in every instance adjusted and the schedules maintained and the differentials and classifications of articles upheld. Mr. White advocated allegiance to the State Association. They needed the assistance of the State Association

to back them when they went before the wholesalers on questions which are in conflict with their prices. They should not, however, ask too much of the jobbers. Be sure they were right and then go ahead. The State Association was a very important organization, and should be supported.

Mr. White then read part of the report of his association to show how they solved the financial problem by casting around to find out who was most likely to be benefited by the Iron, Wire and Nail Association, the Pipe Association and the Wagon Makers' Association prices, and by virtually levying an assessment on those most largely benefited. This was responded to very liberally. He said that the question of ways and means was always a very important branch of organization. That it was very necessary that some way should be devised to raise means to enable the State institution to continue its work, and that it was not right that the individual members should spend their own money, as they had to do when they went to Fresno and advanced means to promote the organization in that part of the country. They did it willingly, but it was not right.



FRANK K. MOTT, Executive Committee.

E. A. Eaton, ex-president of the Central Retail Hardware Association, said:

"All the good that has been done for the association is due to our able secretary, Mr. Baxter. However, for the good of the association, I have the pleasure of stating that C. M. Brown of Hollister has assumed the chair, and Mr. Robinson of the same locality the secretaryship, so I hope they will be able to make a better report than I have myself. There is no question in my mind that we have been benefited in more ways than one. Of course, there are many things that can be improved upon. We find a closer and more friendly feeling among ourselves; also coming in contact with the wholesalers through the State organization has been beneficial in a pecuniary way. We are selling goods to-day in a manner satisfactory to ourselves, but without the co-operation of the State, and also the minor associations throughout the State. Very little can be accomplished with the wholesale merchants in San Francisco. They have asked us for concessions, and we have granted them, and we have asked concessions of them which have not been granted. Now I, for one, am always willing to give, and at the same time always willing to take. We are here to adjust some things of most vital importance, not only to individuals, but to the association. I hope to-day and to-morrow every member of this association will have no hesitancy in speaking exactly as he thinks. In that way we can get good, honest expressions of opinion. You don't want to go home dissatisfied with yourself and with the association on what has been accomplished. Without the co-operation of all the members we can't do much as individuals, or



## California Hardware Association.

as an association, and I hope at this meeting that we will have results at least satisfactory.

C. A. Philpott, president of the San Francisco and Oakland Retail Hardware Association, said:

"It is a little surprise to me to be called upon, as I didn't suppose the presidents of the different associations would be called upon to make any remarks to-day. I wanted to prepare my little speech to-night. I will say, however, in the interest of our association, that we have done some good, effectual work. It has been pretty hard sometimes to see our way clear; to see how we were going to accomplish certain things, but we have accomplished some things, and we have a whole lot to accomplish yet, and we hope during this convention we will have the assistance of every association within the State Association."

Roy Hall, president of the San Joaquin Valley Retail Hardware Association, said:

"I am pleased to have this privilege and opportunity of briefly reviewing the progress we are making in the San Joaquin Valley. You have noted in the president's



R. BARCROFT, Executive Committee.

address our growth in numbers, and this has been the source of considerable pleasure and enthusiasm to us. Aside from that, those in the San Joaquin Valley who are not members of our association have passed it up to us in charge, with the exception of the merchants of Fresno, to set them an example, and in assuming that responsibility, we organized what we termed the Fresno Hardware Dealers' Association, and in that association we have every Hardware merchant and every Implement dealer in the town of Fresno in this association. We met, elected officers and agreed to meet every other Tuesday night, without notice. That is our meeting night, and every member is expected to be there, and I am pleased to say that nearly every member attends the meetings. At these meetings we discuss various matters of interest to all concerned. We have established prices on all the staple articles in the Hardware and Implement line, and as quickly as these prices are established our secretary mails every secretary of our association in the San Joaquin Valley prices set, and if there is a change in the market, whether the change be in San Francisco or locally, every member of our association gets that notice in the next mail. He is thus kept in touch with the price of every article. We meet and chat, and are good fellows—speak and sing and have a good time, and we always make it a point to invite all the traveling men in the Hardware line to attend these meetings. I don't think we have had any meeting at which there have not been some traveling men present. We are pleased to have them with us, and some of them

suggest and enter into our discussions, and they have done a great deal of good for us along the line of association work. In the San Joaquin Valley we are doing a good work; I have met a great many members of our association, and I have yet to meet one who regrets having joined. I only wish that at this session of the State Association some plan could be advanced and adopted wherein we could secure the membership of every Hardware merchant in the State. Eighty per cent. of the Hardware dealers in the San Joaquin Valley are members of our association, and some of them are general merchandise dealers."

William F. Lutz, of the Southern California Retail Hardware and Implement Association, said:

"As vice-president of my association, I have but a short report to make. We have gained about fifty members during the past year; our membership, however, is scattered over a territory of about 250 miles, and you can all readily see that the eighty odd members we now have amount to but very little as far as representation goes. Some of us have worked very hard to get the membership up to what it is now. On account of the great distance, we seem to be up against it. We have at present not quite 50 per cent. of the Hardware and Implement dealers of Southern California as members of our association, and unless we can devise ways and means, I'm afraid we won't accomplish very much in Southern California. I have been after our worthy president and some of the rest of the committee to come down and meet our people in Los Angeles, but on account of the shortage of funds we have not been able to accomplish much."

Mr. Maxwell, president of the Alameda County Retail Hardware Association, said:

"Like Mr. Philpott, I didn't suppose that the infant organization would be called on for any report. Originally, the Alameda County Retail Hardware Association was connected with the San Francisco and Oakland dealers, but last May, after some discussion, they decided it would be better to have an Alameda County organization, and we organized with ten members, having all the members in the county, in Alameda, Berkeley and Oakland, excepting three. We have tried very hard to get those members in, but haven't succeeded yet. We live in hope, however, of doing so. Otherwise, our association is getting along very well. We have an established price on Tools, the same as San Francisco dealers' association. On Nails we have had a good deal of bother trying to get a price maintained. These three dealers who are not members of the association have cut the price. We have taken it up with the jobbers and they have seemed willing and given us some time to try and regulate these prices, but as yet we have no price on Nails; it looks, however, as if we would have. The jobbers have promised to help us on everything we have approached them, and if we go in a body I think they will."

### The Question of Finance

was then taken up. After protracted discussion, the question was, on motion, submitted to a committee consisting of the presidents of the several local associations, and during its deliberation a recess was taken.

After recess, Mr. White, chairman of the committee, made the following report:

"Your committee met and got what information they could regarding the indebtedness of this association. We find that there is \$650.20 indebtedness, for which no provision has been made; we find there are 286 members in the different organizations; we have, therefore, recommended that the words "one dollar and fifty cents" of Article 1 of the By-Laws be stricken out, and the words "five dollars" be inserted. That will produce a very fair revenue to pay off our indebtedness, and put us on a better financial standing, and if that is continued, it will help the good work along."

The following resolutions were adopted after considerable debate:

*Resolved*, That Article 1 of the By-Laws of this State Association, relating to the per capita tax, be amended to read as follows:

"The finances of the California State Retail Hardware Association shall be provided for as follows:

"Each local association shall be assessed \$5 per capita annually for each member of said local association, to be levied and collected from the executive committees of such local associations on the first Monday of March of each year."

#### "A and C" Cards.

The president then read a communication from H. W. Bernard, secretary of the Pacific Hardware and Metal Association, in relation to the distribution of "A and C" cards:

*Resolved*, That the State secretary be instructed to acknowledge the receipt of this communication and to send a letter to the secretary of each local association, requesting that they furnish him with a list of their members who desire these cards sent to them, and that he then send a list of our members desiring these cards to the secretary of the Pacific Hardware and Metal Association, requesting that these "A and C" cards be sent them, at least the yellow.

#### The Question of Retailing

Stoves, Tinware and also Builders' Hardware by the wholesalers was then taken up, and on motion was referred to a committee consisting of E. A. Eaton, John C. White, Henry Gracey, A. L. Nichols, M. M. Brown and John P. Maxwell. The committee was instructed by the convention to arrange for a conference with the wholesalers interested on Saturday morning, 24th inst., in the convention rooms at the California Hotel, and to report to the president at the earliest possible moment.

It was then moved, seconded and unanimously carried that this committee have full power to make any negotiations; that every member of the association pledge his hearty support to the committee; and, furthermore, that the name of every jobber who refused to accede to the propositions made by the committee be reported back to every individual member of the association, and that any action taken receive the hearty approval of the association.

#### Paints and Oils.

The Paint and Oil question was, by resolution, referred to the State Executive Committee, to be by them taken up for action at the earliest possible moment.

#### FRIDAY MORNING SESSION.

After calling the convention to order, the president announced that he had a communication from the California Wagon and Implement Association in relation to a certain agreement regarding Mowers and Rakes, which would be taken up later on.

Mr. Lutz said he noticed that this agreement in relation to Mowers and Rakes only covered the central and northern part of the State, and left out the Salinas Valley and Southern California. He wanted to see these sections included. Discussion followed, and it was moved and carried that the Pacific Hardware and Metal Association be requested to put the Southern California Retail Hardware and Implement Association on same footing as the others.

#### Catalogue House Question.

It was also moved and carried that it be the sense of the convention as a body to refrain from handling the goods of any manufacturers who make a practice of dealing with catalogue houses, and that the secretary be instructed to furnish each member of the association with a list of those who do, and that they use their discretion about handling the goods of such manufacturers.

The president appointed a Nominating Committee for the selection of officers as follows: C. W. Philpott, A. F. Brady, F. Barcroft, Chas. A. Ricketts and F. Rittigstein.

During the absence of this committee the following resolutions were adopted:

*Resolved*, That the communication received from W. H. Stanley be tabled.

*Resolved*, That the matter of the State Association affiliating with the National Association be referred to the Executive Committee, and if it be in their judgment advisable to affiliate with the National Association, that they be empowered to do so.

*Resolved*, That the matter of forming associations in Stockton and the Santa Clara Valley be referred to the Executive Committee for action as early as possible.

#### Report of Nominating Committee.

The Nominating Committee reported as follows through their chairman, C. A. Ricketts:

I have not had the pleasure of being at any meeting prior to this, but I am informed that our president and vice-president have served in their official capacity in a manner which could hardly be improved upon. This committee appreciate the amount and importance of the work placed on the executive officers, and we appreciate the efficient manner in which our president and vice-president have handled these matters; but we are informed that they positively decline to accept renomination, and now we beg to present to you the following nominations for officers of this State Association:



JOHN P. MAXWELL, Executive Committee.

#### PRESIDENT.

Roy Hall, Fresno, of the San-Joaquin Association.

#### VICE-PRESIDENT.

Wm. F. Lutz, Santa Ana, of the Southern Association.

#### SECRETARY.

Henry Gracey of the San Francisco Association.

#### TREASURER.

H. C. Bennett of the San Francisco Association.

#### EXECUTIVE COMMITTEE.

J. W. Hellman, Los Angeles, of the Southern Association.  
H. Geohagan, Pasadena, of the Southern Association.  
Jno. C. White, Marysville, of the Pacific Association.  
G. A. Johnson, Redding, of the Pacific Association.  
Chas. W. Barrett, Fresno, of the San Joaquin Association.  
R. Barcroft, Merced, of the San Joaquin Association.  
E. A. Eaton, Salinas, of the Central Association.  
C. A. Ricketts, San Luis Obispo, of the Central Association.  
S. V. Armstrong, San Francisco, of the San Francisco Association.  
M. M. Brown, San Francisco, of the San Francisco Association.  
Jno. P. Maxwell, Oakland, of the Alameda Association.  
Frank K. Mott, Oakland, of the Alameda Association.

It was voted that this list of officers be the choice of the convention for the ensuing year. The following resolution was adopted unanimously:

*Resolved*, That Section 1 Article 4 Constitution and By-Laws of this State Association be amended to read as follows:

The regular meeting of this State Association shall be held annually in San Francisco, commencing on the first Wednesday in March.

#### FRIDAY AFTERNOON SESSION.

At 2 o'clock representatives from the wholesale chapters met with the California State Retail Hardware Association, and the meeting resolved into a joint executive session. After prolonged discussion it was voted that the secretary of the California State Retail Hardware Association be requested to write the secretary of the Pacific Hardware and Metal Association, requesting them not to throw prices open without first having a con-



sultation with the Executive Committee of the California State Retail Hardware Association. The convention then adjourned *sine die*.

#### Entertainment.

The delegates as the guests of the San Francisco Association and the Pacific Coast Hardware & Metal Association with their wives, daughters and sweethearts, gathered at Techau Tavern at 6 o'clock, where they sat down to a most enjoyable German supper.

At 8 o'clock all went to the Tivoli Opera House, where they witnessed "The Mikado."

#### Meeting of the Executive Committee with Jobbers.

The committee met with the jobbers dealing in Stoves, Tinware, &c., and discussion followed, in which Mr. Watkins of the firm of W. W. Montague & Co. was the principal spokesman. Nothing definite was arrived at, and it was agreed that they should meet again on Monday, February 9.

It was decided that a committee be appointed to wait upon Mr. Ralston and the catalogue companies in an endeavor to adjust the matter of discriminating among dealers in regard to catalogues. The following committee was appointed: E. A. Eaton, Chas. W. Barrett, and M. M. Brown.

It was voted that the secretary be instructed to notify all the associations of the action of the convention here in reference to the change in the by-laws in regard to subscriptions to the association; in other words, instead of the words "one dollar and fifty cents" in Article 1 of by-laws the words "five dollars" shall be inserted; and that the secretary notify the secretaries of the various associations to send this money in as soon as possible, regardless of the date mentioned in the by-laws.

It was determined that the forming of an association in Stockton and the Santa Clara Valley be left to the president of the association, and that he instruct the secretary to call the committee together at such time as he deemed expedient.

It was also decided that the secretary address a letter to the Committee on Paints and Oils, asking that the president be informed as to the result of their efforts and to hand in a report at the very earliest date possible.

The Executive Committee then adjourned.

### AGRICULTURAL EXPOSITION IN BUENOS AIRES.

THERE will be an event of interest to manufacturers of Agricultural Implements and grain seed merchants in Buenos Aires, Argentine Republic, in the form of an Exposition of Agriculture, beginning May 20 and closing June 10, 1903, given under the auspices of the Argentine Rural Society. Buenos Aires, in 1900, had a population of 836,381, and was fifteenth in list of the largest cities in the world. Foreign products will be admitted in competition, and there will be exhibited agricultural products and those that come from them in the first transformations. The exhibits will include vegetable, mineral and chemical manures, grains for seed, Agricultural Implements of all kinds, together with Agricultural Machinery and the Utensils and Machines for such industries as viti-viniculture, wine and silk worm culture, grist mills, breweries, textiles, sugar, fisheries, apiaries, hunting and kindred industries. There will be a horse fair and show of animals bred for slaughter. All exhibits will enter free of duty; duty being demanded only when entered for sale. Further information in detail can be obtained of R. A. de Toledo, Argentine Consul-General, room 124, Produce Exchange Building, New York.

#### NOXALL PAINT.

THE ENTERPRISE PAINT COMPANY, 209 to 217 South Clinton street, Chicago, are calling the attention of the trade to their Noxall Fast Color Paint, which is guaranteed by the makers to give satisfaction in every particular. The company issue a monthly periodical, entitled "Paint Enterprise," which will be mailed free to all dealers on application.

### RAND-McNALLY NEW INDEXED ATLAS.

RAND, McNALLY & CO., 160-174 Adams street, Chicago, and 142 Fifth avenue, New York, have recently issued a fine new indexed Atlas of the World, bound in two volumes, one pertaining to the United States, the other describing foreign countries. The bindings are cloth, half morocco and full morocco. The maps are based on the latest obtainable surveys, scientific research, census reports and other official and authentic data of late issue. One of the newest and an exclusive feature is a series of relief maps, photographically depicting the physical configuration, lake and river systems and chief towns of every State and Territory and every grand division of the earth. The political maps show the latest adjustments of boundaries, territorial partition, results of exploration, Government surveys, &c. The large city maps cover the most important cities of the United States and foreign countries on a scale adapted to practical use. Then there are inset maps supplementing the others and illustrating on a larger scale important details. The synopsis of contents herewith affords a comprehensive idea of the scope of the work and its value to business men as well as to students and litterateurs—viz., there are 196 pages of colored maps, 60 monochrome physical relief maps, 250 inset maps of harbors, city environs, important islands, ship canals, strategic strongholds and other notable features; 135 pages of index matter, locating more than 200,000 places on the globe; 219 pages of descriptive text, each of the 547 pages being 21 x 15½ inches, and 10 pages of contents and topical index. The indexing is of such a character that all important and unimportant places, whether rivers, creeks, lakes, ponds, mountains, cities, hamlets, &c., can be instantly located by means of letters and figures. The changed relations of Cuba, Porto Rico, Hawaii, Samoa, Guam and the Philippines are recognized by the inclusion of a new large scale map for each island or group, with inset maps of noteworthy features and physical maps wherever trustworthy surveys have made their production possible. Cable and commercial routes are also given at length. The descriptive matter includes an Encyclopedic Atlas, also, physiographical, industrial and commercial, ethnological, historical, political and sociological divisions. In compact form will be found the height of mountains, length or drainage area of rivers, general character of soil, flora and fauna, climate, conditions of health, the agricultural, mineral, forest and fisheries' resources, industrial development, history or institutions of a country or the particular thing a given city stands for, as well as many other topics comprehensively treated.

### THE GRAND CROSSING TACK COMPANY.

THE GRAND CROSSING TACK COMPANY, Grand Crossing, Chicago, Ill., issue catalogue E and price-list relating to their line of Tacks, Nails, Wire Nails, Staples, Rivets, Wire, &c. The Tack department has been the foundation of the business out of which the other departments have grown. The company make and carry in stock, they state, every variety, kind and style of Tacks, comprising a complete assortment from which they can fill orders very promptly for all regular sizes and grades. Special Tacks can be made to order from sample or description.

THE HALL-ROBERTSON HARDWARE COMPANY, Fargo, N. D., are distributing to customers a combined mail order book and calendar. The calendar part is made up of a heavy cardboard back, about 10 inches square, with cord for suspending it, to the lower portion of which is attached a cardboard receptacle for holding the mail order book and directed envelopes. Upon the receptacle is fastened the calendar. The order book contains 50 order sheets, perforated at the top, with pink colored sheets between to receive carbon copies of the orders. At the bottom of each order sheet it is stated that the goods will be shipped on the same day the order is received.

## THE TRAVELING SALESMAN HIS METHODS AND CONTROL

BY SAMUEL MASTERS.

### CHAPTER VIII.—Route Lists.

EVERY salesman should, as has already been said, have a list of the dealers in his territory, with definite information as to whom he may and may not sell—or rather whom he must and must not try to sell. When salesmen travel upon the basis contemplated in the system under discussion a form like the one shown herewith has been found to answer admirably.

#### Filling Out the Form.

In filling this form, the routing clerk takes from his card index case the cards for the towns upon the route and gives them to the stenographer, who copies them upon the blank sheet, indicating the business and the ratings. When this is done he takes the sheet and lightly

credit man's ruling, and tell him why firms that he is inclined to consider safe are rejected. In cases where the ratings are incorrect, and he has positive information at variance with them, he can report the matter and set on foot inquiries which will result in the credit man's getting special reports and latest information, and arriving at the real facts. Much can happen between the issuance of the reference books and it is not always certain that the ratings are strictly up-to-date at the time of going to press. So clearly is the value recognized of giving salesmen the ratings of dealers that many jobbers furnish their men with the pocket edition of the reference books touching upon their particular territory.

In the form shown, the route sheet being issued in this form for the first time and the system new, only six months calls are available, and there is no chance for comparison in this particular. It is advisable to issue new sheets every six months, and thus when on July 1, 1903, the next sheet is made up the two periods of six months be contrasted. In the next sheet

ROUTE No. 17.									
Feb. 10, 1903.					SALESMAN, H. A. BENNETT.				
H. HARDWARE.		S. STOVES AND TINWARE.		T. TINNERS.		I. AGRICULTURAL IMPLEMENTS.			
STATE AND TOWN.	FIRMS.	BUSINESS.	DUN.	BRADSTREET.	1-01 TO 1-02.		1-02 TO 1-03.		
					CALLS.	SALES.	CALLS.	SALES.	
ILLINOIS.							6		
Aaronville	Andrew Brown	H	D2	R B		1106 50	12	1720 46	
	C. P. Hunter	HS	A3	U C			2	13 00	
	Manning & Holmes	T	M4	E					
Abatown	Bixby Bros.	H	K3 1/2	V D		720 19	6	1215 90	
	Huntington Hardware Co.	ST	H3	V D					

Route List Form.

cancels by a line drawn with a pen or lead pencil the names of the firms whose accounts are not desired. From his field records he takes the number of calls reported and writes them with ink in the proper columns and gives the list to the bookkeeper in order that that functionary may insert the total sales.

#### Salesmen Should Be Given Ratings.

It is desirable to give the salesmen the ratings in order that they may have some idea of the standing of the firms, even though the credit man's permission to sell is all that is required to enable him to solicit trade, and he has no personal responsibility in the matter, for the volume of purchases naturally depends largely upon the firm's business, which in turn is usually in proportion to its capital. Where no definite limit is placed upon the sales the salesman's personal judgment is often a factor of value in preventing too great an indebtedness and the credit man learns that he can depend upon the judgment of some men more than upon others and can safely extend credit to firms of limited capital upon the routes of some men whom he would not dare to accredit on the lists of other men who have less discretion.

#### An Aid to the Salesman.

Salesmen pick up information concerning the standing of the different firms from various sources, and often are misinformed by jealous competitors, who are liable to underrate their rivals, or by careless statements of the man-who-knows-it-all, who is usually a very unsafe authority. In such cases the ratings of the commercial agencies made after careful investigation are a correction, and give the salesman a confidence he would not otherwise have.

#### An Aid to the Credit Man.

This information is of value in still another way. The ratings give the salesman the authority for the

sales and calls in the first period would cover a year, and in the second, six months only. On January 1, 1904, the entire year of 1903 would appear in the second period and thus two years' business would appear for comparison.

#### The List Enlarges the Salesman's Field.

When for the first time a list of accredited dealers is given a salesman, he is almost certain to find that he can sell firms he thought unacceptable. A salesman is apt to lay undue stress upon disputes between his principals and his customers, and to imagine that because of some trouble which caused a break in relations his employers would not care to have the account reopened. Troubles in his limited field are remembered long after the busy man of accounts at home has forgotten them, or learned to view them indifferently in the vanishing perspective of time. Too often, also, he imagines that an old customer holds a grudge, and would not buy, when in reality he is anxious for a reconciliation. Again when there are cities of good size upon the route there are often good firms of which the uninformed salesman who travels in a net is not aware. In every instance, without known exception, the putting of a hitherto uncharted route upon this basis extends the salesman's field of operations without widening his territory, and often gives him enough additional work to make it advisable to drop some of the towns at the jobber's request, to permit the formation of new routes.

#### An Aid—Not a Hindrance.

Now it must be constantly borne in mind that it is not desired in any way to limit or reduce the efficiency of the force of salesmen in order to make room for more. Every man, new and old, must have all the scope for his efforts that he needs, and the new men must not get their territory by robbing the old. In the beginning each man is given all the towns he claims; as soon as



possible he is given a route list as described in this chapter, and made to understand that he is at liberty to sell all the accredited dealers whose names appear thereon. Everything that can possibly be done in the way of giving the widest possible field for his efforts in his territory is done, and if he has any fear at the beginning that he will be the loser by the new system it is soon dispelled. With the support this system gives and the spurring to greater effort through comparison of sales for different periods the efficiency of the ordinary salesman is greatly increased, and if he has more territory than he can cover comfortably he loses simply that which he cannot care for, and which the records show is of no value to him. He is to be excused for some natural nervousness when he is first required to send in his field records, and for fear that through ignorance of the conditions of an over zealous effort to show results by the routing clerk he may be hampered in some way. If he is hindered or his efficiency reduced in any way it would be well to change the man in charge of the work just as soon as possible.

#### The Bookkeepers' Part.

It may simplify matters for the bookkeepers if the sales are given in even dollars, the cents being omitted, and the result will be of equal value, since only a general comparison is desired. In some offices the addition of this work to the bookkeepers' duties is an injustice to an already overworked man, but in general he can do it easily if the routing clerk uses judgment in the time of presenting the sheets to be posted, and pays due heed to statement and trial balance days. It is not a long job to write in on such sheets the business in the current ledger and the previous year's business in the ledger last closed can be transcribed by any entry clerk. The jobber will save much annoyance and often vexatious delays in the issuance of the route sheet if he will make an adequate provision for having this portion of the work done.

### MISCELLANEOUS NOTE.

#### Spooled Insulated Wire.

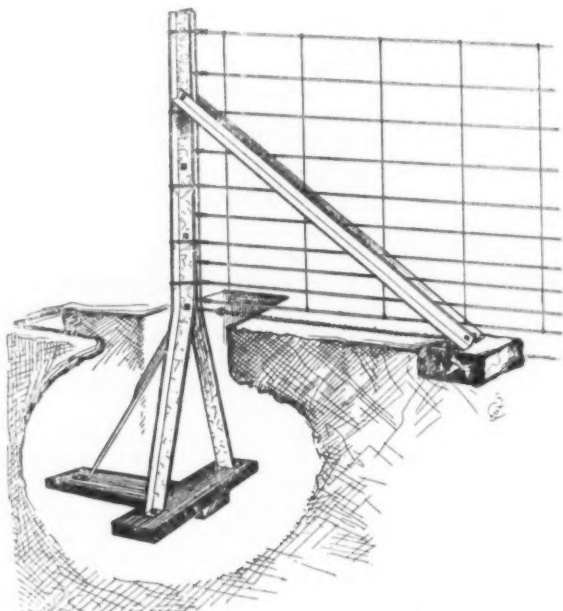
The Malin Company, Cleveland, Ohio, are putting No. 18 insulated wire, assorted colors, on 25, 50 and 100 foot spools. The advantage of marketing insulated wire in this form is explained by the company as follows:

The small consumer of insulated wire always wishes to purchase it by the foot. He knows that he wants 25, 50 or 100 feet, but he knows nothing about the weight. Unless spooled wire is handled, the dealer must measure off the quantity wanted, roll it into a coil and weigh it before delivering it. Insulated wire on spools obviates this trouble, pleases the buyer, for in using it he finds it easy to manage (it can be pulled from the spool as if it were thread), and it is more profitable to the dealer because he can get a much higher price for so neat a package than he can for an unsightly coil.

#### The Stay There Anchor Post.

Chase Colvin, South Charleston, Ohio, is offering the end post shown in the accompanying cut. The upright or main part of the post is made of two galvanized steel angles placed side by side and bolted together, with washers separating them far enough to admit the wires of the fence between them. One edge of each angle projects in the direction of the pull of the fence. The angles are bent just under ground so as to spread into an inverted V-shape, bracing the post sidewise. There is also an anchor rod extending from between the two uprights at the top of the ground to the tail piece of the base. The bases are made of two pieces of 2 inches thick oak plank, each 3 feet long. These are soaked in coal tar, and being buried in the ground 3½ to 4 feet deep, are referred to as lasting indefinitely. The planks are spiked together T-shape, and have an abundance of surface to hold enough weight of dirt to prevent the post raising, either from the pull of the fence or from the effects of the frost. The post also has two angle steel

braces above the ground, separated far enough by washers so that the wires of the fence go between them, but being bolted together. The lower ends of these braces are designed to rest on a rock planted solidly in the ground. The lower end of the brace is held to its

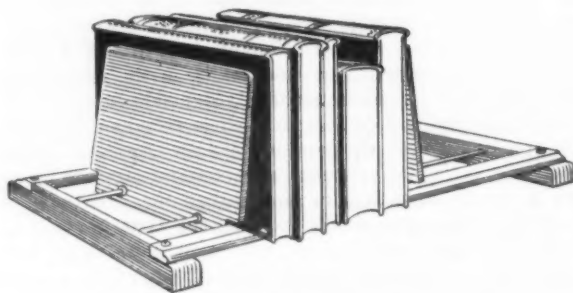


*The Stay There Anchor Post.*

place by a cable or brace rod extending back to the post. The rod is threaded at the post end so as to draw up or let out the brace to obtain the desired adjustment. The point is made that the end or anchor posts of a wire fence are its main stay, and that on these the life and usefulness of the fence depend. If a line post decays at the top of the ground it can easily be removed and another one put in its place, so long as the ends are all right; but when the end posts decay, rise in the ground, or the bracing gives way, the fence sags, and must either be entirely restretched or its usefulness is gone.

#### Adjustable Book Holder.

The adjustable book holder shown in the accompanying cut is 7 x 12 inches in size, colored in imitation of fancy wood, varnish finish. The device holds one or a



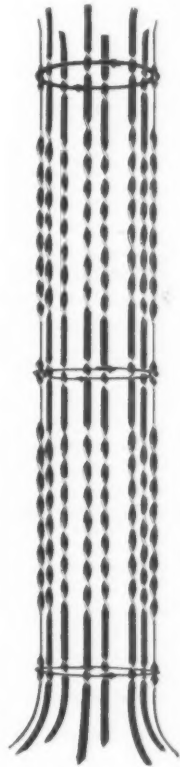
*Adjustable Book Holder.*

dozen books in an upright position, clamped tightly or loosely, ready for instant use. The holders are designed for use in offices, homes, libraries and schools, and are offered by the Westcott-Jewell Company, Seneca Falls, N. Y.

STURGES & BURN MFG. COMPANY, Chicago, manufacturers of Milk Cans and Milk Can Stock, advise us that a portion of their factory was damaged by fire on the 21st ult., and that therefore there will be a slight delay, not exceeding ten days, in the filling of orders already placed. The company impress upon the trade, however, that their present disability will be ephemeral, and they solicit a continuance of business.

### The Glen Adjustable Steel Tree Guard.

The Glen Mfg. Company, Ellwood City, Pa., have placed on the market the adjustable steel tree guard shown in the accompanying cut. The guards are made of heavy Bessemer steel, finished in black enamel, and are offered in various diameters and in two different heights, firmly put together without rivets. They are so

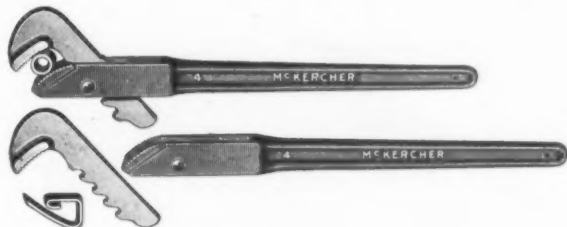


*The Glen Adjustable Steel Tree Guard.*

constructed as to admit of an adjustment of 1 inch in diameter, which is often desirable. The guards are referred to as combining neatness and substantial construction, making them desirable as a protection for shade trees as well as adding to the general appearance of the property upon which they are placed. The guards are put up in convenient packages, and are crated for safe shipment.

### The McKercher Pipe Wrench.

The accompanying cuts represent a wrench, designed not only for pipe work but for general use as well, put on the market by the McKercher Wrench & Tool Company, Jackson, Mich. The wrench has only three parts in its make up: the handle, jaw and spring; each of



*The McKercher Pipe Wrench.*

which is referred to as a first-class and strong piece in itself. The parts are alluded to as being in proportion, each with the other, and as being of the best drop forge work and malleable iron castings, well pinned and riveted. Regarding the strain, it is explained that when in use the point of purchase and line of strain from pipe to the end of the handle are connected and act in conjunction. Among the points of excellence the following are enumerated: That the wrench is simple, because of the few pieces used in its manufacture; that it

is strong, because of the formation and make of the parts, and that the manner of assembling the parts makes it durable, there being nothing to get out of gear or to become clogged with an accumulation of dirt and grease. The wrench is at present made in six sizes: 6, 10, 14, 18, 24 and 36 inch, taking pipe from  $\frac{1}{8}$  to 4 inches. The illustrations show the 18-inch wrench, which fully represents other sizes, larger or smaller, except the 36-inch, which is supplied with a gas pipe handle, screwed into the section containing the jaw and spring. This company were organized March 18, 1902, and the intervening time has been required to get into position for business. The dies, patterns and cutting tools are all special, each size of wrench requiring several. The company have, therefore, been unable until the present to offer the wrench to the trade. George McKercher, superintendent of the company, is the patentee of the wrench.

### The Hold Fast Clothes Pin.

The clothes pin illustrated herewith consists of two pieces of wood held together by a wire spring. The spring is so formed that one piece serves to keep the mouth of the pin closed and also to form a guide, so that the two parts of the pin cannot come apart. A slight pressure at the top of the pin opens the jaws, and



*The Hold Fast Clothes Pin.*

when placed on the clothes line it holds with a force, it is stated, that will not permit the clothes to be blown off the line; and at the same time the form of the jaw is such that it will not tear the most delicate fabrics. The spring is made of galvanized wire, and is warranted not to rust. The illustration shows the actual size of the pin, which is patented and manufactured by the Demeritt & Palmer Packing Company, Waterbury, Vt.

### The Adjustable Hack Saw Frame No. 40.

The Fitchburg File Works, Fitchburg, Mass., are placing on the market the adjustable hack saw frame herewith shown. It is made of a fine grade of steel, full nickel plated, with a highly finished rock maple handle. The frame is referred to as being built to withstand not only the use, but the abuse to which such tools are subjected. It has an extra heavy back,  $\frac{3}{8}$  inch deep, made of steel 0.060 inch thick. It is explained that the



*The Adjustable Hack Saw Frame No. 40.*

saw back will not cripple when the proper amount of strain is placed upon the saw blade to insure getting the best service out of it. The frame is adjustable to any blade from 8 to 12 inches in length, taking every intermediate length of blade by means of notches cut in the top of the extension arms and two pins set in the top of the back. Consequently, it is explained, the objectionable feature of weakening a frame to obtain an adjustment is thereby overcome. The blade can be turned to face in four different ways without removing it from the frame. At the handle end of the frame there is an extra long sleeve or nut in the handle, this being securely fastened by a pin through both the nut and handle. A feature to which attention is directed is the absence of projections on the frame which might catch the clothing of the person using it.



### Adjustable Box Flanged Hinge and Strike.

Bommer Bros., 257-271 Classon avenue, Brooklyn, N. Y., have just put on the market, supplementary to their large lines of spring hinges, an improved form of hinge for use in connection with marble or any stone slabs, such as are used in lavatory work. Fig. 1 illustrates a single acting adjustable box flanged hinge, Fig. 2 representing the necessary strike made in a similar way. This hinge and strike are made with an adjustment either way of  $\frac{1}{8}$  inch, so that if hinges for  $1\frac{1}{4}$ -inch marble work are ordered and the marble varies in thickness, as it invariably does, a quick and neat job can be made on a slab  $1\frac{1}{8}$  to  $1\frac{3}{8}$  inches thick expeditiously, without filing out the box or making an eyesore of it by unsightly underlaying. An advantage of much impor-

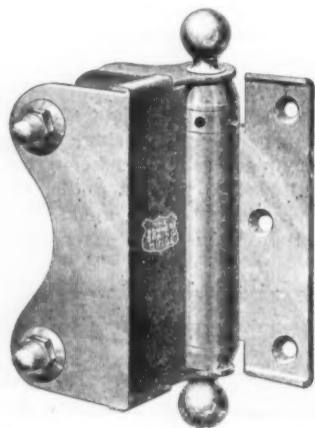


Fig. 1.—Single Acting Adjustable Box Flanged Hinge.

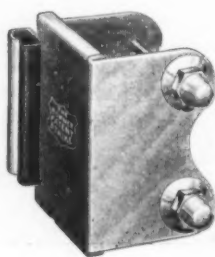
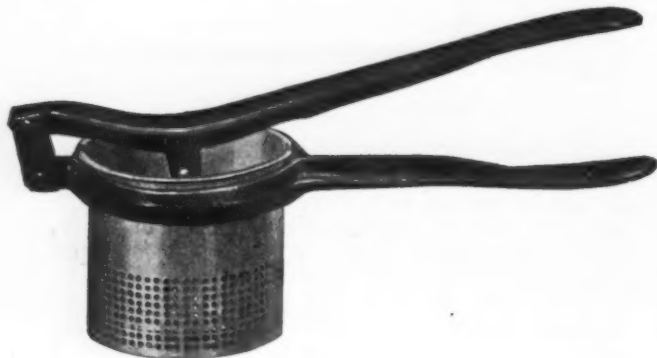


Fig. 2.—Adjustable Strike Used with Hinge.

tance is the annoyance and expense to the hardware dealer done away with. A full line of sizes are made, including 1,  $1\frac{1}{4}$ ,  $1\frac{1}{2}$ ,  $1\frac{3}{4}$  and 2 inches, which can be used with any slab from  $\frac{7}{8}$  to  $2\frac{3}{8}$  inches thick. The strike is similarly made, the striking edge being fitted with rubber to take up shock as the door swings to. Both hinges and strikes are accurately formed in dies from sheet metal, one part of the box sliding within the other inside the limits named, the finely finished nuts clamping securely together both sides of the hinge. They can be supplied in all finishes. In addition to the advantages referred to these hinges are sold at a marked reduction in price from those of cast metal.

### The Brighton Vegetable and Fruit Press.

The Logan & Strobridge Iron Company, New Brighton, Pa., are putting on the market the vegetable and fruit press shown herewith. It is referred to as being made of the best materials by the best mechanics. A special feature of the press is the free action of the



The Brighton Vegetable and Fruit Press.

plunger, the movement of which is made to be free and easy, to be self adjusting to all conditions. The press is designed for pressing fruit and vegetables, for making jellies, syrups, catsups, shredding potatoes, &c. It is explained that the press is a regular potato masher,

and that boiled potatoes, with their skins on, passed through the press come out in slender shreds, leaving their skins behind. The press is alluded to as being simple and strong in construction.

### The Peerless Woven Wire Field and Hog Fence.

In Fig. 1 of the accompanying cuts is shown the manner in which the stays are connected with the cables in the woven wire field and hog fence shown in Fig. 2.



Fig. 1.—The Tie on the Peerless Fence.

The ends of the stays pass between the cable wires and then wrap tightly around them, to prevent the stays slipping on the cable or becoming disconnected in any way. The ends of the stays protrude a little at each cable, and a little more on the lower cables, to act as barbs, to

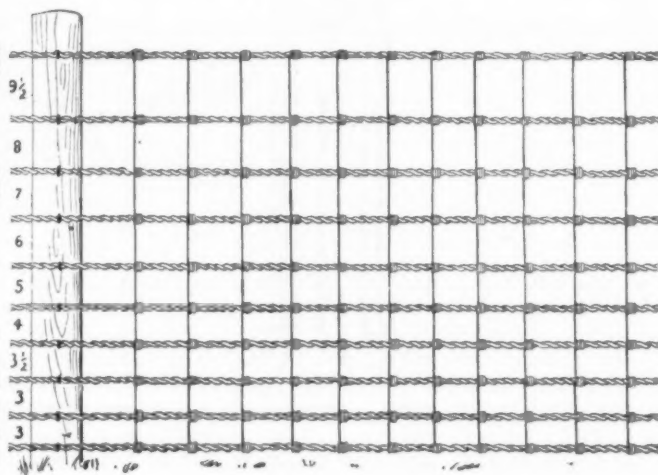


Fig. 2.—The Peerless Woven Wire Field and Hog Fence.

prevent damage by stock or hogs, which, it is remarked, would be the case with a smooth fence. At the bottom the stays protrude downward to prevent hogs rooting under it. The fence is manufactured by the Denning Fence Works, Cedar Rapids, Iowa.

### The Monarch Steel Sash Lock.

The Champion Safety Lock Company, formerly of Cleveland, but now located at Geneva, Ohio, are placing on the market the sash lock here illustrated. It is pressed from fine grades of rolled steel, and is referred to as embodying simplicity, strength and durability.



The Monarch Steel Sash Lock.

The lock is alluded to as being unbreakable in use, and as easily lifting the upper sash from a low point, bringing the sashes in perfect alignment and locking them securely. A sample of the lock and a price-list will be sent to dealers making application to the company for them.

# Current Hardware Prices.

REVISED MARCH 3, 1903.

**General Goods.**—In the following quotations General Goods—that is, those which are made by more than one manufacturer, are printed in *Italics*, and the prices named, unless otherwise stated, represent those current in the market as obtainable by the fair retail Hardware trade, whether from manufacturers or jobbers. Very small orders and broken packages often command higher prices, while lower prices are frequently given to larger buyers.

**Special Goods.**—Quotations printed in the ordinary type (Roman) relate to goods of particular manufacturers, who are responsible for their correctness. They usually represent the prices to the small trade, lower prices being obtainable by the fair retail trade, from manufacturers or jobbers.

**Range of Prices.**—A range of prices is indicated by means of the symbol @. Thus 33 1/2 @ 33 1/2 & 10% signifies that the

price of the goods in question ranges from 33 1/2 per cent. discount to 33 1/2 and 10 per cent. discount.

**Names of Manufacturers.**—For the names and addresses of manufacturers see the advertising columns and also THE IRON AGE DIRECTORY, issued April, 1902, which gives a classified list of the products of our advertisers and thus serves as a DIRECTORY of the Iron, Hardware and Machinery trades.

**Standard Lists.**—A new edition of "Standard Hardware Lists" has been issued and contains the list prices of many leading goods.

**Additions and Corrections.**—The trade are requested to suggest any improvements with a view to rendering these quotations as correct and as useful as possible to Retail Hardware Merchants.

## Abrasives—

Adulterate in Carbons:  
Crystal..... 1/2 ton \$90.00  
Grain..... 1/2 ton \$120.00  
See also *Emerg.*

## Adjusters, Blind—

Domestic, 1/2 doz. \$3.00..... 33 1/2  
North's..... 1/2 doz. \$3.00..... 10%  
Zimmerman's—See *Fasteners, Blind.*

## Window Stop—

Ives' Patent..... 25 & 55  
Taplin's Perfection..... 25 & 55

## Ammunition—See Caps, Cartridges, Shells, &c.

## Anvils—American—

Armand Hammer, Wrought..... 1/2 doz. \$8.40  
Bluel Patent Trenton..... 1/2 doz. \$8.40  
Eagle Anvils..... 1/2 doz. \$7.40  
Hay-Budden, Wrought..... 1/2 doz. \$9.40  
Horseshoe brand, Wrought..... 1/2 doz. \$9.40

## Imported—

Peter Wright & Sons..... 1/2 doz. \$10.40

## Anvil, Vise and Drill—

Millers Falls Co., \$18.00..... 10 & 10%

## Apple Parers—See Parers, Apple, &c.

## Aprons, Blacksmiths—

Hull Bros. Co.:  
Lots of 1 doz..... 25%  
Small or Lots..... 20%  
Lots of 3 doz..... 30%

## Augers and Bits—

Com. Double Spur..... 70 & 100 & 75%  
Dorsey Machine Augers..... 100 & 100 & 75%  
Car Bits, 12-in. twist..... 60 & 60 & 10%  
Jennings' Pattern:  
Auger Bits..... 50 & 100 & 50 & 60%  
Ford's Auger and Car Bits..... 25%  
Forester Pat. Auger Bits..... 25%  
C. E. Jennings & Co.:  
No. 10 ext. lip, R. Jennings' list 25 & 10%  
No. 30, R. Jennings' list 40 & 70 & 10%  
Russell Jennings..... 25 & 100 & 20%  
L'Hommieu's Car Bits..... 15 & 10%  
Mayhew's Countersink Bits..... 45%  
Millers' Falls..... 50 & 100 & 75%  
Pugh's Black..... 20%  
Pugh's Jennings' Pattern..... 35%  
Snell's Auger Bits..... 60%  
Snell's Belt Hangers' Bits..... 60 & 10%  
Snell's Car Bits, 12-in. twist..... 60%  
Wright's Jennings Bits (R. Jennings' list)..... 50%

## Bit Stock Drills—

Standard List..... 65 & 50 & 70%

## Expansive Bits—

Clark's small, 1 1/2; large, 2 1/2..... 50 & 10%  
Lavigne's Clark's Pattern, No. 1, 1/2 doz., 2 1/2; No. 2, 1 1/2..... 50 & 10%  
C. E. Jennings & Co., Steer's Pat. 25 & 10%  
Swan's..... 60%

## Gimlet Bits—

Common Double Cut, gro., \$2.50 to 3.00  
German Pattern..... gro., \$4.00 to 4.25

## Hollow Augers—

Bonney Pattern, per doz., \$11.00 to 11.50  
Ames..... 35 & 10%  
New Patent..... 35 & 10%  
Universal..... 20%  
Wood's Universal..... 25%

## Ship Augers and Bits—

Ford's..... 40%  
Snell's..... 40%  
C. E. Jennings & Co.:  
L'Hommieu's..... 15 & 10%  
Watrous'..... 33 & 10%

## Awl Hafts, See Hafts, Awl.

## Awls—

Brad Awls:  
Handled..... gro., \$2.75 to 3.00  
Unhandle, Shouldered, gro. 50 & 60  
Unhandle, Patent..... gro. 60 & 70%  
Peg Awls:  
Unhandle, Patent..... gro. 31 & 30%  
Unhandle, Shouldered, gro. 55 & 70%  
Scratch Awls:  
Handled, Common..... gro. \$3.50 to 4.00  
Handled, Socket..... gro. \$11.50 to 12.00  
Huswood..... 40%

## Awl and Tool Sets—See Sets, Awl and Tool.

## Axes—

First Quality, factory brands..... \$6.00  
First Quality, jobbers' brands..... \$5.50  
Second Quality..... \$5.00 to 5.25

## Axle Grease—See Grease, Axle.

## Axles—

Concord Loose Collar..... 1/2 doz. \$4.50  
Concord Solid Collar..... 1/2 doz. \$4.50  
No. 1 Common..... 3/4 doz. \$4.50  
No. 2 Solid Collar..... 1/2 doz. \$4.50  
Nos. 11 to 14..... 65 & 100 & 70 & 5%  
Nos. 15 to 18..... 75 & 75 & 10%  
Nos. 19 to 22..... 75 50 & 10%  
2 1/2 cash to 10 day

## Boxes, Axle—

Common and Concord, not turned..... 1/2 doz. \$4.50  
Common and Concord, turned..... 1/2 doz. \$4.50  
lb. 1/4 @ 5c

## Half Patent..... lb. 8 @ 9c

## Balances—Sash—

Caldwell new list..... 50%  
Putman's..... 60%

## Spring—

Spring Balances..... 50 & 100 & 60%  
Chatillon's:  
Light Spg. Balances..... 40 & 10%  
Straight Balances..... 40%  
Circular Balances..... 50%  
Large Dial..... 30%  
Poulsen..... 50%

## Barb Wire—See Wire, Barb.

## Bars—Crow—

Steel Crowbars, 10 to 40 lb., per lb..... 24 & 3c

## Towel—

No. 10 Ideal, Nickel Plate..... 1/2 doz. \$8.50  
No. 20 Ideal, Brass Finish..... 1/2 doz. \$8.50

## Baskets—

Hoffman's Drick Baskets..... each \$3.25

## Beams, Scale—

Scale Beams, List Jan. 12, '85, 40 & 10%  
Chatillon's No. 1..... 30%  
Chatillon's No. 2..... 40%

## Beaters—Egg—

Lightning Chain, 1/2 doz., \$1.15; 1/2 doz..... \$12.00  
National Mfg. Co.:  
No. 1 Ford, Family size..... \$7.00  
No. 2 Dover, Hotel size..... \$14.00  
Taplin Mfg. Co.:  
No. 63 Improved Dover..... \$6.50  
No. 73 Improved Dover..... \$7.50  
No. 75-2 Imp'd Dover, Tin'd..... \$9.00  
No. 100 Improved Dover..... \$8.00  
No. 102 Improved Dover, Tin'd..... \$9.00  
No. 150 Improved Dover, Hotel..... \$15.00  
No. 152 Imp'd Dover, Hotel, T'd..... \$7.00  
No. 200 Imp'd Dover Tumbler..... \$9.00  
No. 252 Imp'd Dover 1.5 in. Tin'd..... \$10.00  
No. 300, Imp'd Dover Mammoth, 1/2 doz..... \$7.00  
Wonder (S. S. & Co.)..... 1/2 doz. \$27.00

## Bellows—

Blacksmith, Standard List, 70 & 70 & 10%

## Blacksmiths'—

Inch..... 31 32 33 34 35 36 37 38 39 40  
Eac..... \$3.50 3.75 4.25 4.80 5.35 6.15  
Extra Length:  
Each..... \$4.00 4.55 5.10 5.60 6.40 7.50

## Molders—

Inch..... 9 10 11 12 14 16  
Doz..... \$6.75 7.25 8.50 9.50 12.00 14.50

## Hand—

Inch..... 7 8 9 10 12  
Doz..... \$4.75 5.25 5.50 6.25 7.00 8.00

## Bells—Cow—

Ordinary goods..... 75 & 50 & 75 & 10%  
High grade..... 70 & 70 & 10%  
Jersey..... 75 & 10%  
Texas Star..... 50%

## Door—

Abbe's Gong..... 45%  
Barton Gong..... 55%  
Home, R. & E. Mfg. Co.'s..... 55 & 10%  
Lever and Pull, Sargent's..... 60 & 10%  
Yankee Gong..... 35%

## Hand—

Hand Bells, Polished..... 60 & 50 & 60 & 10%  
White Metal..... 55 & 55 & 10%  
Nickel Plated..... 55 & 55 & 10%  
Swiss..... 60 & 60 & 10%  
Cone's Globe Hand Bells..... 35 & 35 & 10%  
Silver Chime..... 35 & 35 & 10%

## Miscellaneous—

Farm Bells..... 1/2 doz. \$2.40  
Steel Alloy Church and School..... 70 & 70 & 10%  
American Tube & Stamp'g Co. Gongs..... 70%  
Trip Gong Bells..... 55 & 100 & 60%

## Belting—Rubber—

Agricultural (Low Grade), 75 & 100 & 60%  
Common Standard..... 75 & 70 & 10%  
Standard..... 70 & 70 & 10%  
Extra..... 60 & 100 & 60%  
High Grade..... 60 & 100 & 60 & 10%  
Seamless stitched—Imperial..... 15 & 35  
Boston Belting Co..... 70 & 75  
Nagara..... 60 & 55

## Leather—

Extra Heavy, Short Lap..... 60 & 60 & 5%

## Regular Short Lap 60 & 100 & 60 & 100 & 10%

Standard..... 70 & 70 & 5%  
Light Standard..... 70 & 10%  
Cut Leather Lacing..... 60 & 10%  
Leather Lacing Sides, per sq. ft. 18c

## Cotton—

Rossendale-Reddaway B. & H. Co.:  
Sphinx Brand..... 60 & 10%  
Durable Brand..... 70%

## Bench Stops—See Stops, Bench

## Benders and Upsetters, Tire—

Detroit Perfect Tire Bender..... 40%  
Green River Tire Benders and Upsetters..... 20%  
Detroit Stoddard's Lightning Tire Upsetters, No. 1, \$3.75; No. 2, \$6.50; No. 3, \$9.50; No. 4, \$14.75. No. 5, \$18.75.

## Bicycle Goods—

John S. Leng's Son's 1902 list:  
Chain..... 50%  
Parts..... 50%  
Spokes..... 50%  
Tub..... 60%

## Bits—

Auger, Gimlet, Bit Stock Drills, &c.—See Augers and Bits.

## Blocks—Tackle—

Common Wooden..... 60 & 100 & 75%  
No. 100 Steel Blocks, with For. P's Patent Shovels..... 50 & 10%  
Lane's Patent Automatic Lock and Junior..... 30%  
Stowell's Novelty, Mal. Iron..... 50 & 10%  
See also Machines, Hoisting.

## Beards Stove—

Zinc, Crystal, &c..... 40 & 100 & 50%

## Boils—

Carriage, Machine &c.—Common, list Feb. 1, '92..... 60 & 100 & 5%

Norway Iron, \$3.00, list Jan. 1, '93..... 80 & 80 & 5%

Phila. Eagle, \$5.00, list May 24, '93..... 80 & 80 & 5%

Bolt Ends, list Feb. 14, '95, 65 & 25 & 60 & 5%

Machine, list Oct. 1, '93..... 65 & 5%

Machine with C & T Nuts..... 60 & 25 & 60 & 5%

NOTE.—Jobbers are in many cases under-selling the manufacturers.

## Door and Shutter—

Cast Iron Barrel, Round Brass Knob:

Inch..... 3 4 5 6 8  
Per doz..... \$9.25 39 39 37 37 35

Cast Iron Spring Foot:

Inch..... 6 8 10  
Per doz..... \$1.00 1.25 1.75

Cast Iron Chain, Flat, Japanned:

Inch..... 6 8 10  
Per doz..... \$7.15 1.05 1.30

Cast Iron Shutter, Brass Knobs:

Inch..... 6 8 10  
Per doz..... \$0.57 80 1.00

Wrought Barrel Brass Knob:

Inch..... 3 4 5 6 8  
Per doz..... \$0.44 50 61 70 1.28

Wrought Barrel..... 75 & 100 & 75 & 100 & 10%

Wrought..... 100 & 50 & 50 & 10%

Wrought Flush, B. K., 50 & 100 & 60 & 10%

Wrought Shutter..... 100 & 100 & 100 & 5%

Wrought Square Neck..... 50 & 50 & 10%

Wrought Stink..... 50 & 50 & 10%

Ives' Patent Door..... 60%

## Stove and Plow—

Plow..... 60 & 5%  
Stove..... 80 & 100 & 80 & 100 & 10%

## Tire—

Common..... 77 1/2 @ 80%  
Norway Iron..... 80 @ 80 & 5%  
American Screw Company:  
Norway Phila., list Oct. 16, '94..... 82 1/2  
Eagle Phila., list Oct. 16, '94..... 85  
Bay State, list Dec. 28, '99..... 77 1/2  
Franklin Mower Co.:  
Norway Phila., list Oct. 16, '94, 82 1/2  
Eagle Phila., list Oct. 16, '94..... 85  
Eclipse, list Dec. 28, '99..... 77 1/2  
Russell, Burdall & Ward Bolt & Nut Co.  
Empire, list Dec. 28, '99..... 77 1/2  
Norway Phila., list Oct. '94..... 82 1/2  
Crown Bolt Co.:  
Tire Bolts..... 77 1/2

## Borers, Tap—

Borers Tap, Ring, with Handle:

Inch..... 1 1 1 1 1 2  
Per doz..... \$1.30 5.00 5.75 7.25  
Inch..... 2 1/2 2 1/2  
Per Doz..... \$8.55 11.50

Enterprise Mfg. Co., No. 1, \$1.25; No. 2, \$1.65; No. 3, \$2.50 each..... 25%

## Boxes, Mitre—

C. E. Jennings & Co..... 25 & 10%  
Langdon..... 15 & 10%  
Schulz..... 40%

## Braces—

NOTE.—Most Braces are sold at net prices.  
Common Ball, American..... \$1.15 to 1.25  
Barber's..... 50 & 100 & 60 & 10%  
Fray's Genuine Spofford's..... 60%  
Fray's No. 70 to 120, \$1 to 1.25, 207 to 414..... 60%  
C. E. Jennings & Co..... 50 & 30%  
Mayhew's Hatchet..... 60%  
Mayhew's Quick Action Hay Patent..... 50%  
Millers Falls Drill Braces..... 25 & 10%  
P. S. & W. Co. Peck's Patent 60 & 100 & 65%

## Brackets—

Wrought Steel..... 75 & 100 & 80%  
Bradley's Wire Shelf:  
Full cases..... 80 & 100 & 10%  
Broken cases..... 80 & 10%  
Griffin's Pressed Steel..... 70 & 10%  
Griffin's Folding Brackets..... 70 & 10%

## Bright Wire Goods—See Wire and Wire Goods.

## Broilers—

Wire Goods Co..... 75 & 75 & 10%

## Buckets, Well and Fire—

See Pails

## Bucks Saw—

Booster..... 1/2 doz. \$36.00

## Bull Rings—See Rings, Bull.

## Butts—Brass—

Wrought list Sept., '96..... 30 & 30 & 5%  
Cast Brass, Tiebout's..... 50%

## Cast Iron—

Fast Joint, Broad..... 50 & 50 & 10%  
Fast Joint, Narrow..... 50 & 50 & 10%  
Loose Joint..... 100 & 50 & 70 & 10%  
Loose Pin..... 70 & 50 & 70 & 10%  
Mayer's Hinges..... 70 & 50 & 70 & 10%  
Parliament Butts..... 70 & 50 & 70 & 10%

## Wrought Steel—

Table and Back Flaps..... 60%  
Narrow and Broad..... 60%  
Inside Blind..... 60 & 10%  
Loose Pin..... 60 & 10%  
Loose Pin, Ball and Steeple..... 60 & 10%  
Tip..... 75%  
Japanned, Ball Tip Butts..... 75%  
Bronzed Wrt. Nar. and Inside Blind Butts..... 45 & 20 & 45 & 25%

## Cages, Bird—

Handy x Brass:  
3000, 5000, 1100 series..... 5%  
1200 series..... 10%  
200, 300, 600 and 900 series..... 40 & 10%  
Handy x Bronze:  
700, 800 series..... 40 & 10%  
Handy x Enameled..... 40 & 10%

## Calipers—See Compasses.

## Calks, Toe and Heel—

Blunt, 1 prong..... per lb. 4 & 4 1/2 c  
Sharp, 1 prong..... per lb. 4 1/2 & 5 c  
Perkins' Blunt Toe..... 5 & 5 c  
Perkins' Sharp Toe..... 5 & 4 c

## Cannons—

Breach Loading, 32 cal. Cartridge, Toy Cannon..... per doz. \$2.00

## Can Openers—See Openers, Can

## Cans, Milk—

Illinois Pattern, \$1.50 2.00 2.25 each,  
Iowa Pattern..... 2.25 2.50 each,  
New York Pattern..... 2.40 2.75 each,  
Baltimore Pattern..... 1.50 2.0



**Cartridges—**

Blank Cartridges:	
25 C. F. \$5.50	10¢55
25 C. F. \$7.00	10¢55
25 cal. Rim. \$1.50	10¢55
25 cal. Rim. \$2.75	10¢55
B. B. Caps. Con. Ball Sngd.	\$1.91
B. B. Caps. Round Ball	\$1.54
Central Fire	25¢
Target and Sporting Rifle	15¢10
Primed Shells and Bullets	15¢10
Rim Fire Sporting	50¢
Rim Fire Military	25¢55

**Casters—**

Bed	70¢70¢10¢
Plate	60¢60¢55¢
Philadelphia	75¢75¢10¢
Boss	70¢70¢10¢
Boss Anti-Friction	70¢10¢
Martin's Patent (Phoenix)	45¢
Standard Lathe Bearing	45¢
Tucker's Patent low list	30¢

**Cattle Leaders—**

See Leaders, Cattle.

**Chain, Coil—**

American Coil, Jobbers' Shipments:	
3 16 1/2 5-16 3/8 7-16 1/2 9-16	
8-16 6-16 1/2 4-16 3-16 1/2 3-16	
3 6 1/2 3 3/4 1 to 1 1/4 inch	
German Coil	60¢10¢10¢

**Halters and Ties—**

Halter Chains	60¢10¢60¢10¢10¢
German Halter Chains, list July 24	97
Cow Ties	60¢10¢60¢10¢10¢
Trace, Wagon, &c.	
Traces, Western Standard: 100 pair	
6 1/2-6-3, Straight, with ring	\$3.00
6 1/2-6-2, Straight, with ring	\$3.10
6 1/2-6-1, Straight, with ring	\$3.50
6 1/2-6-0, Straight, with ring	\$3.50
Add 2¢ per pair for Hooks	
Twist Traces 2¢ per pair higher than	
Straight Link	
Trace, Wagon and Fancy Chains	50¢10¢10¢10¢

**Miscellaneous—**

Jack Chain, list July 24	
Iron	60¢10¢60¢10¢10¢
Brass	60¢10¢60¢10¢10¢
Safety Chain	70¢10¢75¢10¢
Gal. Pump Chain	10¢ 4-1/2 5-1/2
Covert Mfg. Co.	
Breast	40¢25¢
Halter	40¢25¢
Rein	40¢25¢
Stallion	40¢25¢
Covert Saddle Works	
Breast	70¢
Halter	70¢
Hold Back	70¢
Rein	70¢
Onida C. Mfg. Co.	
Am. Cow Ties	40¢10¢10¢
Eureka Coll and Halter	45¢50¢55¢
Niagara Coll and Halter	45¢50¢55¢
Niagara Cow Ties	45¢50¢55¢
Wire Dog Chains	45¢50¢55¢
Wire Goods Co.	
Dog Chain	70¢10¢
Universal Dog-Chain Chain	50¢

**Chalk—(From Jobbers.)**

Carpenters' Blue	gro. 10¢45¢
Carpenters' Red	gro. 35¢40¢
Carpenters' White	gro. 20¢35¢

See also Crayons.

**Checks, Door—**

Bardsley's	40¢10¢
Columbia	50¢10¢
Eclipse	60¢

**Chests, Tool—**

American Tool Chest Co.	
Boys' Chests, with Tools	50¢
Youths' Chests, with Tools	40¢
Gentlemen's Chests, with Tools	30¢
Farmers', Carpenters', etc., Chests,	
with Tools	30¢
Machinists' and Fitters' Chests,	
Empty	50¢
C. E. Jennings & Co.'s Machinists' Tool	
Chests	33¢10¢

**Chisels—****Socket Framing and Firmer**

Standard List	70¢70¢10¢
Buck Bros	30¢
Charles Buck	30¢
C. E. Jennings & Co. Socket Firmer	
No. 10	60¢10¢
C. E. Jennings & Co. Socket Framing	
No. 15	60¢10¢
Swan	70¢
L. & J. White	90¢30¢55¢

**Tanged—**

Tanged Firmers	50¢10¢40¢10¢
Buck Bros	30¢
Charles Buck	30¢
C. E. Jennings & Co. Nos. 19, 181	
L. & J. White, Tanged	16¢10¢

**Cold—**

Cold Chisels, good quality, lb.	13¢15¢
Cold Chisels, fair quality, lb.	11¢12¢
Cold Chisels, ordinary	10¢8¢9¢

**Chucks—**

Beach Pat., each \$8.00	30¢55¢
Pratt's Positive Drive	25¢
Empire	25¢
Blacksmiths	25¢
Skinner Patent Chucks	
Combination Lathe Chucks	40¢
Drill Chucks, Patent and Standard	30¢
Drill Chucks, New Model	25¢
Independent Lathe Chucks	40¢
Improved Planer Chucks	25¢
Universal Lathe Chucks	40¢
Face Plate Jaws	40¢
Standard Tool Co.	
Improved Drill Chuck	45¢
Union Mfg. Co.	
Combination	40¢
Cut Drill	30¢
Squared Serot	30¢
Independent	30¢
Union Drill	30¢
Universal	40¢
Face Plate Jaw	35¢
Westcott Patent Chucks	
Lathe Chucks	50¢

Little Giant Auxiliary Drill	40¢
Little Giant Double Grip Drill	40¢
Little Giant Drill, Improved	40¢
One dia Drill	40¢
Scroll Combination Lathe	40¢

**Clamps—**

Adjustable, Hammers	20¢20¢55¢
Cabinet Sargent's	50¢10¢
Carriage Makers' P. S. & W. Co.	30¢
Carriage Makers' Sargent's	60¢
Best, Parallel	33¢10¢
Lineman's, Union Dr. & F. Co. & Tool Co.	40¢
Saw Clamps, see Vises, Saw Files	

**Cleaners, Drain—**

Iwan's Champion, Adjustable	55¢
Iwan's Champion, Stationary	40¢

**Sidewalk—**

Star Socket, All Steel	per doz. \$4.05 net
Star Shank, All Steel	per doz. \$3.24 net
W. & S. Mfg. Co. 7 1/2 in. 7 1/2 in. 7 1/2 in.	per doz. \$3.05
W. & S. Mfg. Co. 8 in. 8 in. 8 in.	per doz. \$3.25

**Cleavers, Butchers—**

Post Bros	30¢
New Hovey Edge Tool Co.	45¢
Fayette R. Plumb	33¢33¢10¢
P. S. & W.	50¢50¢55¢
L. & J. White	25¢

**Clippers—**

Chicago Flexible Shaft Company	
1892 Chicago Horse	\$8.75
1892 Chicago Horse	\$10.75
Lightning Belt	\$15.00
Chicago Belt	\$20.00
Stewart's Patent Sheep	\$18.50

**Clips Axle—**

Eagle and Superior 1/4 and 5-16	
inch	70¢10¢
Norway, 1/4 and 5-16 inch	70¢70¢10¢

**Cloth and Netting, Wire**

See Wire, &amp;c.

**Cocks, Brass—**

Hardware list:

Compression and Plain Bibbs.

Globe, Kerosene, Racking, &amp;c.

Cocks

**Coffee Mills—See Mills, Coffee.****Collars Dog—**

Brace, Walter B. Stevens & Son's list	40¢
Embossed, Gilt, Walter B. Stevens &	
Son's list	30¢10¢
Leather, Walter B. Stevens & Son's list	40¢

**Combs Mane and Tail—**

Covert's Saddlery Works

**Compasses Dividers, &c.**

Ordinary Goods

Bemis &amp; Call Hdw. &amp; Tool Co.

Dividers

Callipers, Call's Patent Inside

Callipers, Double

Callipers, Inside or Outside

Callipers, Wing

Compasses

J. Stevens &amp; T. Co.

**Compressors Corn Shock—**

J. B. Hughes' per doz.

**Conductor Pipe, Galva.—**

L. C. L. to Dealers:

Territory. Noted. Not noted.

Eastern

Central

Southern

S. Western

Terms: 2¢ for cash. With delivery on

per lb. at 10¢.

**Coolers, Water—**

See also Eave Troughs.

Labrador

Gal.

Iceland, ea.

Gal.

Galv. Lined Ea.

Gal.

Gal.

Each.

**Coopers' Tools—**

See Tools, Coopers.

**Cord—**

Sash

Braided, Drab

Braided, White, Com.

Cable Laid Italian, lb.

Common India

Cotton Sash Cord, Twisted

Patent Russia

Cable Laid Russia

India Hemp, Braided

India Hemp, Twisted

Patent India, Twisted

Anston Cordage Co.

Old Glory, Nos. 7 to 12

Anston, Nos. 7 to 12

Old Colony, Nos. 7 to 12

Anston Drab, Nos. 7 to 12

Pearl Braided, cotton

Massachusetts, White

Massachusetts, Drab

Eddystone Braided Cotton

Harmony Cable Laid Italian

Osawan Mills

Crown, Solid Braided White

Braided, Giant, White

D. M. Steward Mfg. Co.	
Metal Workers' Crayons, gr.	\$2.50
Soapstone Pencils, round	flat
or square	\$1.50
Rolling Mill Crayons, gr.	\$2.50
Railroad Crayons (compo-	sition) gr.
sition) gr.	\$2.00

**See also Chalk.****Crooks, Shepherds—**

Fort Madison, Heavy	per doz. \$7.00
Fort Madison, Light	per doz. \$6.50

**Crow Bars—See Bars, Crow.****Cultivators—**

Victor Garden

**Cutlery Table—**

International Silver Company:

No. 12 Medium Knives, 1817

Star, Eagle, Rogers &amp; Hamilton and

Anchor

Wm. Rogers &amp; Son

Simeon L. &amp; Geo. H. Rogers Company:

12 cut Medium Knives

No. 77 Medium Knives

H. Mayhew Co.

Red Devil

Smith &amp; Hemenway Co.

Woodward

**Meat and Ford—**

Hale's, Nos. 11 &amp; 111 12 &amp; 112 13 &amp; 113

Per doz.

American

Nos.

Enterprise

Nos.

Each

Dixon's

Nos.

Home No. 1

Little Giant

Nos.

N. E. Foot Capper

Sterling

No. 2

New Triumph No. 605

Woodruff's

Nos.

Enterprise Beef Shavers

**Slaw and Kraut—**

Henry Disston &amp; sons:

Slaw, Con. Grater, &amp;c.

Kraut Cutter 24 x 7.26 x 8.30 x 9.55

Kraut Cutters 36 x 12.40 x 12.40

Sterling, 8 1/2 inch

Tucker &amp; Dorsey Mfg. Co.

Augers

Slaw Cutters, 1 Knife, 1 gr.

Slaw Cutters, 2 Knife, 1 gr.

**Tobacco—**

All Iron, Cheap

Enterprise

National

Sargent's

Sargent's No. 2

Sargent's No. 2

**Washer—**

Appleton's

Bonney's

**Diggers, Post Hole, &c.—**

Dalbey Post Hole Auger

Iwan's Improved Post Hole Auger

Iwan's Vaughan Pattern Post Hole

Iwan's Perfection Post Hole Digger

Iwan's Split Handle Post Hole Diggers

Kohler's Universal

Kohler's Little Giant

Kohler's Hercules

Kohler's Invincible

Kohler's Rival

Kohler's Pioneer

Never-Break Post Hole Diggers

Sargson

**Dividers—See Compasses.****Doors Screen—**

Phillips, style E, 1/4 in.

Phillips, style E, 1/2 in.

Phillips, style E, 3/4 in.

Porter's Plain, No. 6

Porter's Ornamental, No. 70

Porter's No. 99

Porter's No. 44

**Drawers Money—**

Tucker's Pat. Alarm Till No. 1

No. 18, No. 15, No. 3, No. 4, No. 18

**Drawn Knives—**

See Knives, Drawing.

**Drills and Drill Stock—**

Common Blacksmiths' Drills

Smith & Hemenway Co	40¢55¢
Stanley's R. & L. Co.'s	
No. 64, Varnished Handles	70¢70¢10¢10¢
No. 84	70¢70¢10¢10¢
Swan's	
Nos. 65 to 68	50¢
No. 40	40¢10¢
Nos. 25, 35 and 45	20¢10¢10¢

**Eave Trough Galvanized**

Territory

Eastern

Central

Southern

S. Western

Terms, 2¢ for cash.

See also Conductor Pipe and Elbows.

**Elbows and Shoes—**

Factory shipments

# Gates, Molasses and Oil—

Steeb's Pattern.....80¢@80¢10¢

## Gauges—

Marking, Mortise, &c.....50¢10¢@50¢10¢10¢

Fulton's Butt Gauge.....30¢10¢

Stanley R. & L. Co.'s Butt & Rabbet Gauge.....20¢@20¢10¢10¢

Wire, Brown & Sharpe's.....35¢

Wire, Morse's.....35¢

Wire P. S. & W. Co.....30¢10¢

## Gimlets—Single Cut—

Nail, Metal, Assorted, gro.....\$1.50@1.60

Spike, Metal, Assorted gro.....\$2.80@3.25

Nail, Wood Handled, Assorted, gro.....\$1.75@2.00

Spike, Wood Handled, Assorted, gro.....\$3.25@3.50

## Glass American Window

Jobbers' List, Dec. 16, 1902.

From store, Single and Double 90¢10¢

F. O. B. factory, carload lots:

Single and Double.....50¢10¢@21¢4¢

2000 box lots.....90¢25¢

## Glue—Liquid, Fish—

List A, Bottles or Cans, with Brush.....37½¢@50¢

List B, Cans (½ pts., pts., qts) 35¢@48¢

List C, Cans (½ gal., gal.).....25¢@45¢

International Glue Co. (Martin's).....40¢10¢@50¢

## Grease, Axle—

Common Grade.....gro. \$5.00@6.00

Dixon's Everlasting.....10-lb pails, ea. 85¢

Dixon's Everlasting, in bxs. ½ doz. 1 lb.....\$1.20; 2 lb \$2.00

## Griddles, Soapstone—

Pike Mfg. Co.....33¢@33½¢10¢

## Grindstones—

Bicycle Emery Grinder.....\$0.50

Bicycle Grindstones, each.....\$2.50@3.00

Pike Mfg. Co:

Improved Family Grindstones, per inch, per doz.....\$2.00 (83¢4¢)

Pike Mower Knife and Tool Grinder, each.....\$4.00

Velox Ball Bearing, mounted, Angle Iron Frames.....each, \$3.25

## Guards Snow—

Cleveland Wire Spring Co.:

Galv. Steel ½ 1000.....\$9.00

Copper ½ 1000.....\$18.00

## Halters and Ties—

Covert Mfg. Co.:

Web.....45¢2¢

Jute Rope.....40¢5¢2¢

Sisal Rope.....20¢2¢

Covert's Saddle Work:

Web and Leather Halters.....70¢

Jute and Manila Rope Halters.....70¢

Sisal Rope Halters.....60¢2¢

Jute, Manila and Cotton Rope Ties.....70¢

Sisal Rope Ties.....60¢10¢

## Hammers—

### Handled Hammers—

Heller's Machinists'.....40¢10¢@40¢10¢10¢

Heller's Farriers'.....40¢10¢@40¢10¢10¢

Magnet Tack, Nos. 1, 2, 3, \$1.25, \$1.50, \$1.75.....40¢10¢@40¢10¢10¢

Pick, Sledge & Wilcox.....50¢

Fayette H. Plumb.....50¢7½¢@50¢10¢7½¢5¢

Plumb, A. E. Nail.....30¢47½¢@30¢10¢7½¢

Engineers' and B. S. Hand.....50¢7½¢@50¢10¢7½¢5¢

Machinists' Hammers.....50¢5¢@50¢10¢2½¢

Riveting and Timbers.....40¢10¢@40¢10¢2½¢

Sargent's C. S. New List.....40¢

### Heavy Hammers and Sledges—

\$lb. and under.....lb. 45¢ } 75¢5¢@75¢

5 to 15 lb.....lb. 30¢ } 40¢10¢

Over 15 lb.....lb. 20¢ } 40¢10¢

Wilkinson's Smiths'.....9½¢@10¢10¢

## Handles—

### Agricultural Tool Handles—

Aze, Pick, &c.....40¢50¢5¢

Hoe, Rake, &c.....60¢60¢5¢

Fork, Shovel, Spade, &c.:

Long Handles.....60¢

D Handles.....50¢

### Cross-Cut Saw Handles—

Atkins'.....40¢25¢

Champion.....45¢45¢10¢

Diaston's.....50¢

### Mechanics' Tool Handles—

Auger, assorted.....gro. \$2.30@2.50

Bradawl.....gro. \$1.25@1.50

Chisel Handles:

Apple Tanged Firmer, gro. ass'd, \$3.25@3.35; large, \$2.50@3.20.

Hickory Tanged Firmer, gro. ass'd, \$1.75@2.20; large, \$3.50@3.70.

Apple Socket Firmer, gro. ass'd, \$1.70@1.85; large, \$2.00@2.25.

Hickory Socket Firmer, gro. ass'd, \$1.60@1.75; large, \$1.75@2.00.

Hickory Socket Framing, gro. ass'd, \$3.50@3.75; large, \$2.55@2.85.

File, assorted.....gro. \$1.00@1.15

Hammer, Hatchet, Axe, &c.....60¢

Hand Saw, Varished, doz. 70¢75¢

Not Varished.....55¢@60¢

Plane Handles:

Jack dos. 50¢; Jack Bolter.....55¢@60¢

Fore, doz. 35¢@39¢; Fore, Bolter.....70¢75¢

Millers Falls Adj. and Hatchet Auger Handles.....15¢10¢

Nicholson Simplicity File Handle, ½ doz.....\$0.25@1.50

## Hangers—

Barn Door, New Pattern, Round Groove, Regular:

Inch.....\$ 4 5 6 8

Single Doz.....\$0.85 1.30 1.50 1.90 2.20

# Barn Door, New England Pattern, Check Back, Regular:

Inch.....\$ 4 5 6 8

Single Doz.....\$1.10 1.60 2.15 2.70

Allith Mfg. Co.

Reliable.....per doz. \$15.00

Chicago Spring Butt Co.:

Friction.....25¢

Oscillating.....25¢

Big Twin.....25¢

Chisholm & Moore Mfg. Co.:

Baggage Car Door.....50¢

Elevator.....40¢

Railroad.....55¢

Cronk & Carrier Mfg. Co.:

10000 Axle.....60¢

Roller Bearing.....60¢10¢

Lane Bros. Co.:

Parlor Ball Bearing.....\$4.15

Parlor, Standard.....\$4.85

Parlor, New Model.....\$2.25

Parlor New Champion.....\$2.25

Barn Door, Standard.....50¢10¢10¢5¢

Covered.....50¢10¢10¢5¢

Lawrence Bros.:

Advance.....90¢

Cleveland.....90¢10¢

Crown.....60¢

Giant.....50¢10¢

New York.....80¢

Peerless.....60¢10¢

Sterling.....60¢

Swing, No. 95.....50¢10¢

Union, No. 44, \$5.00; No. 45 \$7.00;

No. 46, \$9.00.

McKinney Mfg. Co.:

No. 1, Special, \$15.....60¢10¢

No. 2, Standard, \$18.....60¢10¢

Hinged Hangers, \$18.....50¢

Meyers' Stagon Hangers, 30¢10¢ (net)

C. S. Smith Mfg. Co.:

Lundy Parlor Door.....50¢10¢

Monarch Barn Door.....50¢10¢

Never Jump Hinge.....50¢10¢

Peerless.....50¢10¢

Perfection.....70¢5¢

Phoenix.....70¢5¢

Wagner's Adjustable.....70¢10¢

Warehouse Anti-Friction.....90¢

Stowell Mfg. and Foundry Co.:

Atlas.....40¢

Badger Barn Door.....50¢

Baggage Car Door.....50¢

Climax Anti-Friction.....50¢

Elevator.....40¢

Express.....50¢

Interstate.....40¢

Lundy Parlor Door.....50¢

Magic.....50¢

Matchless.....50¢

Nansen.....60¢10¢

Railroad.....50¢

Street Car Door.....50¢

Steel, Nos. 300, 400, 500.....40¢15¢

Stowell Parlor Door.....50¢

Wild West, Nos. 300, 400, 500.....30¢

Zenith for Wood Track.....50¢

A. L. Swett Iron Works:

Eagle.....60¢10¢

Hylo.....50¢10¢

Perfection.....60¢

Pilot.....50¢

Taylor & Boggs Fly Cog.....50¢15¢

Wilcox Mfg. Co.:

Blake Roller Bearing.....60¢10¢

C. J. Roller Bearing.....60¢10¢

Cycle Ball Bearing.....50¢

Dwarf Ball Bearing.....40¢

Ives, Wood Track.....60¢10¢

L. T. Roller Bearing.....60¢10¢5¢

New Era Roller Bearing.....50¢10¢

O. K. Roller Bearing.....60¢10¢5¢

Prindle, Wood Track.....60¢

Richards' Wood Track.....60¢

Richards' Steel Track.....50¢10¢

Spencer Roller Bearing.....60¢10¢

Tandem Nos. 1 and 2.....60¢

Underwriters' Roller Bearing.....50¢

Velvet.....40¢

Wilcox Auditorium Ball Bearing.....30¢

Wilcox Barn Trolley No. 123.....40¢

Wilcox Elevator Door Hangers.....50¢

Nos. 112 and 122½.....50¢

Wilcox Elevator Door Hangers, No. 132.....40¢

Wilcox Fire Trolley, Roller Bearing.....40¢

Wilcox E. Roy Noiseless Ball Bearing.....40¢

Wilcox New Century.....50¢10¢10¢

Wilcox O. K. Steel Track.....50¢

Wilcox O. K. Trolley.....50¢

Wilcox Trolley Ball Bearing.....40¢

Wilcox Wideman Narrow Gauge Ball Bearing.....40¢

For Track, see Rail.

## Hasps—

McKinney's Perfect Hasp ½ doz.....50¢

Wrought Hasps, Staples, &c.—See Wrought Goods.

## Hatchets—

Best Brands.....50¢50¢10¢

Cheaper Brands.....60¢60¢10¢

Note.—Net prices often made.

## Hinges—

### Blind and Shutter Hinges—

Surface Gravity Locking Blind: (Victor; National; 1893 O. P. Niagara; Clark's O. P.; Clark's Tip; buffalo.)

No.....1 3 5

Doz. pair.....\$0.25 1.75 3.50

### Mortise Shutter:

(L. & E., O. S., Dixie, &c.)

No.....1 1½ 2 2½

Doz. pair.....\$0.70 .65 .60 .55

### Mortise Reversible Shutter, (Buffalo, &c.)

No.....1 1½ 3

Doz. pair.....\$0.75 .70 .65

North's Automatic Blind Fixtures, No. 2, for Wood, \$9.00; No. 3, for Brick, \$11.50

Parker.....70¢75¢

Reading's Gravity.....70¢10¢

Sargent's, Nos. 1, 3, 5, 11 & 13.....70¢10¢

Stanley's Steel Gravity Blind Hinges, ½ doz. sets, without screws, \$0.30; with screws, \$1.15.

Wrightville Hardware Co.:

O. S. Lull & Porter.....7 & 5¢

# Acme, Lull & Porter.....75¢

Queen City Reversible.....75¢

Stenger's Positive Locking, Nos. 1 & 2.....70¢10¢

Shepard's Noiseless, Nos. 60, 65, 55.....70¢10¢

Niagara Gravity Locking, Nos. 1, 3 & 5.....75¢

1893, Old Pat'n, Nos. 1, 3 & 5.....75¢

Tip Pat'n, Nos. 1, 3 & 5.....75¢

Buffalo Gravity Locking, Nos. 1, 3 & 5.....75¢

Shepard's Double Locking, Nos. 20 & 25.....70¢

Champion Gravity Locking, No. 75, 75¢

Steamboat Gravity Locking, No. 10, 75¢

Pioneer, Nos. 90, 45 & 5½.....75¢

Empire, Nos. 101 & 103.....70¢



<b>Mining—</b>	
Buffalo, .....	per sq. ft. \$13.00
<b>Miscellaneous—</b>	
Farriers' .....	doz. \$2.00 to \$3.00
Woolenholms' .....	doz. \$3.00 to \$3.25
<b>Knobs—</b>	
Base, 2 1/2-inch, Birch, or Maple,	
Rubber tip, gro. ....	\$1.10 to \$1.20
Carriage, Jap. ill. sizes, gro. ....	25 to 30c
Door, Mineral, .....	doz. 65 to 70c
Door, Por. Jap'd, .....	doz. 70 to 75c
Door, Por. Nickel, .....	doz. \$2.05 to \$2.15
Bardsley's Wood Door, Shutter, &c. ....	15c
Picture, Sargent's, .....	60 to 10c
<b>Lacing Leather—</b>	
See Belting Leather—	
<b>Ladders Step Etc.—</b>	
Lane's Store, .....	25c
Myers Noiseless Store Ladders, .....	50c
<b>Ladies' Melting—</b>	
L. & G. Mfg. Co., .....	25c
P. S. & W., .....	50c
Reading, .....	60c
Sargent's, .....	45 to 10c
<b>Lanterns— Tubular—</b>	
Regular Tubular, .....	doz. \$1.35 to \$1.75
Left Tubular, .....	doz. \$1.75 to \$2.25
Hinge Tubular, .....	doz. \$1.75 to \$2.25
Other Styles, .....	doz. \$1.00 to \$1.50
<b>Bull's Eye Police—</b>	
No. 1, 2 1/2 inch, .....	\$8.50 to \$2.75
No. 2, 3 inch, .....	\$2.75 to \$3.00
<b>Latches— Gate—</b>	
Hoffman's Safety Gate, .....	per doz. 60c
<b>Thumb—</b>	
Boggin's Latches, with screw, .....	doz. 35 to 40c
<b>Leaders— Cattle—</b>	
Small, .....	doz. 55c; large, 60c
Jovert Mfg. Co., .....	55c
<b>Lifters, Transom—</b>	
R. & E., .....	33 to 45c
<b>Linen—</b>	
Wire Clothes, Nos., 18 19 20	
100' foot, .....	\$2.20 2.00 1.65
75' feet, .....	\$1.80 1.70 1.50
<b>Ossawa Mills—</b>	
Crown Solid, Washed Chalk, .....	33 to 45c
Mason's, No. 0 to No. 5, .....	33 to 45c
<b>Sanson Cordage Works—</b>	
Solid Braided Chalk, No. 0 to 3, .....	40c
Silver Lake Braided Chalk, No. 0, 6, 10, .....	40c
No. 1, 6, 10, 15, 20, 25, 30, 35, 40, .....	40c
<b>Armstrong Water Proofing Co., .....</b>	
gro. \$22.00; Gilt Ed. \$27.00; Air Line, .....	\$20.00; Acme, \$1.00; Alabama, \$1.00;
Empire, \$1.50; Advance, \$1.50; All- .....	ston, \$1.50; Calhoun, \$1.50; Oriole, .....
\$20.00; Albermarle, \$25.50; Eclipse, .....	\$11.00; Chicago, \$1.00; Standard, .....
\$9.00; Columbia, \$9.00, .....	
<b>Locks— Cabinet—</b>	
Cabinet Locks, .....	33 to 45c
<b>Door Locks, Latches, &amp;c.—</b>	
[Not prices are very often made on	
these goods.]	
Reading Hardware Co., .....	50c
R. & E. Mfg. Co., .....	40 to 45c
Sargent & Co., .....	40 to 45c
<b>Elevator—</b>	
Stowell's, .....	40c
<b>Padlocks—</b>	
Wrought Iron, .....	75 to 10c to 30c
R. & E. Mfg. Co. Wrt. Steel and Brass, .....	75 to 10c
<b>Sash, &amp;c.—</b>	
Ives' Patent, .....	55 to 75c
Bronze and Brass, .....	55 to 75c
Crecent, .....	50c
Iron, .....	60 to 75c
Wrought Bronze and Brass, .....	50c
Wrought Steel, .....	55c
Reading, .....	60 to 10c to 70c
<b>Machines— Boring—</b>	
Com. Upright, Without Augers, .....	\$2.00
Com. Angular, Without Augers, .....	\$2.25
<b>R. &amp; E. Mfg. Co. Upr. Int. Angular,</b>	
Improved No. 3, .....	No. 1, \$3.00
Improved No. 4, .....	No. 2, 3.38
Improved No. 5, .....	No. 3, 3.75
Jennings', No. 4, 1.15 No. 1, 1.50	
Millers' Falls, .....	5.75
Snell's, Rice's Pat. 2.50	2.75
<b>Moore's Anti-Friction Differential Pul-</b>	
ley Block, .....	80c
Moore's Hand Hoist, with Lock Brake, 20c	
Moore's Portable Pneumatic Hoist, .....	25c
<b>Ice Cutting—</b>	
Chandler's, .....	15 to 10c
<b>Mallets—</b>	
Hickory, .....	45 to 50c
Lignumvite, .....	45 to 50c
Tinners', Hickory and Applewood, .....	50 to 55c
<b>Mats— Door—</b>	
Elastic Steel (W. G. Co.), .....	10c
<b>Mattocks—</b>	
See Picks and Mattocks,	
<b>Menner's Hose Menders, .....</b>	
Robinson's Hose Menders, .....	per gro. \$2.00
<b>Milk Cans—See Cans, Milk</b>	
<b>Mills— Coffee, etc.—</b>	
Enterprise Mfg. Co., .....	25 to 30c
Hoffman's Side, Coffee and Spice, .....	per doz. \$1.25
National, List Jan. 1, '94, .....	30c
Parker's Columbia, Victoria, 30 to 60c	
Parker's Box and Side, .....	50 to 10c
Swift, Lane Bros Co., .....	30c
<b>Mowers Lawn—</b>	
[Net prices are generally quoted,	
Cheap, .....	
Good, .....	all sizes, \$1.90 to \$1.95
10 12 14 16-inch	
High Grade L. 25 4.50 4.75 5.00	
Continental, .....	60 to 10c
Great American, .....	70c
Great American Ball Bearing, .....	60 to 10c
Quaker City, .....	70c
Pennsylvania, .....	60 to 10c
Pennsylvania Ball Bearing, .....	60 to 10c
Pennsylvania Golf, .....	50c
Pennsylvania Horse, .....	40c
Pennsylvania Pony, .....	45c

<b>Philadelphia:</b>	
Styles M. S. C. K., T., .....	70 to 10c
Style A, all steel, .....	60 to 75c
Style E, High Wheel, .....	70 to 10c
Steel and Gold Coin, low list, .....	50 to 55c
<b>Nails—</b>	
Cut and Wire. See Trade Report.	
Wire Nails and Brads, Papered.	
List July 20, 1899, .....	
85 to 10c to 10c to 10c to 10c	
<b>Hungarian, Finishing, Upholster-</b>	
ers', &c. See Tacks.	
<b>Horse—</b>	
Nos. 6 7 8 9 10	
A. C., .....	25c 23c 22c 21c 21c 40 to 55c
Ausable, .....	28c 26c 25c 24c 23c 50 to 10c
C. B. K., .....	25c 23c 22c 21c 21c 40 to 55c
Champion, .....	28c 26c 25c 24c 23c 40 to 55c
Clinton, .....	19c 17c 16c 15c 14c 30 to 10c
Maud S., .....	25c 23c 22c 21c 21c 50c
Putnam, .....	23c 21c 20c 19c 18c 33 to 45c
Putnam, .....	10c 10c 10c 10c 10c 10c
Cold Roll, .....	19c 18c 17c 16c 15c 10c to 10c
American, Nos. 5 to 10, .....	90 to 95c
Neonset, .....	Nos. 5 to 10, 12c
Jobbers' special brands, .....	per lb. 8 to 9c
<b>Picture—</b>	
1 1/2 2 1/2 3 3 1/2 inch	
Brass Head, .....	45 to 60 70 95 100 gro.
Por. Head, .....	1.10 1.10 1.10
Crown Picture Nails, .....	per gro. \$1.50
<b>Nippers, See Pliers and Nippers.</b>	
<b>Nuts—</b>	
Cold Punched: Off list,	
Mfrs. or U. S. Standard.	
Square, plain, .....	\$1.50
Hexagon, plain, .....	\$1.60
Square, C. T. & R., .....	\$1.70
Hexagon, C. T. & R., .....	\$1.80
<b>Hot Pressed:</b>	
Mfrs. U. S. or Nar. Gauge Stan'd.	
Square Blank, .....	\$1.80
Hexagon Blank, .....	\$1.90
Square Tapped, .....	\$1.60
Hexagon Tapped, .....	\$1.90
<b>Oakum—</b>	
Best or Government, .....	lb. 64c
Navy, .....	lb. 44c
U. S. Navy, .....	lb. 54c
Plumbers' Spun Oakum, .....	34c
In carload lots 1/2 lb. off f.o.b. New	
York.	
<b>Oil Tanks—See Tanks, Oil.</b>	
<b>Oilers—</b>	
Brass and Copper, .....	65 to 65c to 10c
Tin or Steel, .....	70 to 10c to 75c
Zinc, .....	75 to 75c to 55c
<b>Chase or Paragon:</b>	
Brass and Copper, .....	65 to 65c to 10c
Tin or Steel, .....	75 to 75c to 10c
Zinc, .....	75 to 75c to 10c
Malleable, Hammers' Improved, No. 1,	
\$3.80; No. 2, 4; No. 3, 4.40; No. 2, 20c	
Malleable, Hammers' Old Pattern,	
same list, .....	50 to 10c
Ame 1 in Tube & Stamping Co., .....	70 to 10c
Spring Bottom Cans, .....	60 to 10c
Railroad Oilers, &c., .....	60 to 10c
<b>Oponers— Can—</b>	
French, .....	doz. 35c
Iron Handle, .....	doz. 2.50 to 2.75
Sprague, Iron Handle, .....	per doz. 4.00
Sardine Scissors, .....	doz. \$1.75 to \$3.00
National, .....	per doz. \$1.25
Stowell's, .....	per doz. 35 to 45c
Tip Top, .....	per doz. 40 to 75c
<b>Egg—</b>	
Nickel Plate, .....	per doz. \$2.25
Silver Plate, .....	per doz. \$3.50
<b>Packing—</b>	
Asbestos Packing, Wick and Rope,	
15 to 15 1/2 lb.	
<b>Rubber—</b>	
Sheet, C. I., .....	8 to 12c
Sheet, C. O. S., .....	9 to 13c
Sheet, C. B. S., .....	10 to 14c
Sheet, Pure Gum, .....	50 to 70c
Sheet, Red, .....	35 to 40c
Jenkins' Standard, .....	35 to 40c
<b>Miscellaneous—</b>	
American Packing, .....	7 to 10c lb.
Cotton Packing, .....	15 to 14c lb.
Italian Packing, .....	9 to 12c lb.
Jute, .....	35 to 40c lb.
Russia Packing, .....	7 to 11c lb.
<b>Pails— Creamery</b>	
S. S. & Co., with gauges, No. 1 \$6.25;	
No. 2, \$6.50; No. 3, .....	
<b>Galvanized—</b>	
Price per doz.	
Quart, .....	10 12 15
Water, Regular, .....	1.75 2.00 2.25
Water, Heavy, .....	2.75 3.00 3.25
Fire, Rd. Bottom, .....	2.30 2.60 2.90
Well, .....	2.25 2.50 2.75
<b>Pans— Dripping—</b>	
Standard List, .....	60 to 50c to 10c
<b>Fry—</b>	
No. 1 2 3 4 5	
Per doz., .....	\$0.95 1.05 1.15 1.30 1.65
<b>Roasting and Baking—</b>	
Rezal, S. S. & Co., .....	per doz. Nos. 5, \$4.50;
10 \$5.25; 20 \$5.75; 30 \$6.25.	
Simplex, .....	per doz.
No. 40 50 60 140 150 160	
\$2.75 3.25 3.75 3.00 3.25 4.00	
<b>Paper—Building Paper—</b>	
Asbestos, .....	lb.
Building Felt, .....	2 1/2c
Mill Board, sheet, 10 x 10 inches 3 1/2c	
Mill Board, roll, thicker than 1-16	
inch, .....	3 1/2c
Mill Board, roll, 1-16 in. thick and	
less, .....	1 1/2c

Rosin Sized Sheathing, 500 sq. ft.	Per roll
Light wt., 25 lbs. to roll, .....	\$0.35 to \$0.37
Medium wt., 30 lbs. to roll, .....	\$0.42 to \$0.45
Heavy wt., 40 lbs. to roll, .....	\$0.50 to \$0.55
Medium Grades Water roof	
Sheathing, .....	\$0.65 to \$1.25
Deafening Felt, 9, 6 and 1 1/2 sq. ft.	
to lb., ton, .....	\$4.50
Red Rope Roofing, 250 sq. set per	
roll, .....	\$1.65
NOTE.—These goods are often sold at	
delivered prices.	
<b>Tarred Paper.</b>	
1 ply (roll 300 sq. ft.), ton, .....	\$29.00 to \$32.00
2 ply, roll 198 sq. ft., .....	\$5 to 65c
3 ply, roll 108 sq. ft., .....	7 to 87c
Slater's Felt (roll 500 sq. ft.), .....	70 to 75c
NOTE.—Above prices often include de-	
livery.	
R. K. M. Stone Surfaced Roofing (roll	
110 sq. ft.), .....	\$2.75
<b>Sand and Emery—</b>	
Flint, .....	60 to 60c to 10c
Garnet, .....	25 to 25c to 10c
<b>Parers— Apple—</b>	
Advance, .....	per doz. \$1.50
Baldwin, .....	per doz. \$5.00
Bonanza Improved, .....	each \$6.50
Dandy, .....	each \$7.50
Eureka Improved, .....	each \$15.00
Family Bay State, .....	per doz. \$36.00
Improved Bay State, .....	per doz. \$7.50
New Lightning, .....	per doz. \$4.00
Reading 72, .....	per doz. \$7.00
Reading 78, .....	per doz. \$6.75
Turn Table '08, .....	per doz. \$6.75
White Mountain, .....	per doz. \$6.00
<b>Potato—</b>	
Saratoga, .....	per doz. \$7.00
White Mountain, .....	per doz. \$6.00
<b>Paris Green—</b>	
Less than 1 ton, .....	per lb.
Arsenic kegs or casks, .....	12 1/2c
Kegs, 100 to 175 lbs., .....	13 c
Kits, 1 1/2, 25, 50 lbs., .....	14 c
Paper boxes, 2 to 5 lbs., .....	14 c
Paper boxes, 1 lb., .....	14 1/2c
Paper boxes, 1/2 lb., .....	15 c
Paper boxes, 1/4 lb., .....	16 c
1 to 5 tons, 1 cent per lb., less 5 tons	
and over, 1 1/2 cents per lb. less.	
<b>Picks and Mattocks—</b>	
List Feb. 23, 1899, .....	70 to 70c to 10c
<b>Pinking Irons—</b>	
See Irons, Pinking.	
<b>Pins— Escutcheon—</b>	
Brass, .....	60 to 60c to 10c
Iron, list Nov. 11, '95, .....	60 to 60c to 10c
<b>Pipe, Cast Iron Soil—</b>	
Standard, 2-6 in., .....	50 to 10c
Extra Heavy, 2-6 in., .....	65c
Fittings, .....	70c
<b>Pipe, Merchant,</b>	
Steel or Iron, Carload Lots,	
f.o.b. Pittsburgh. Galva-	
nized.	
Merchant Pipe, Black, .....	nized.
1/2, 3/4, 1, 1 1/2 inch, .....	65c 65c
1 1/2 inch, .....	70c 70c
2 to 6 inch, .....	75c 65c
7 to 12 inch, .....	75c 65c
Less than carloads, 12 1/2% advance.	
<b>Pipe Sewer—</b>	
Jobbers' Prices—	
Standard Pipe and Fittings, 2 to 2 1/2 in.	
New England, .....	70c
New York and New Jersey, .....	75c
Maryland, Delaware, East Penn., .....	75c
West Penn. and West Va., .....	75c
Virginia, .....	75c
Ohio, Michigan and Ky., .....	75c
Carload lots are generally delivered.	
<b>Pipe, Stove—</b>	
Edwards' Nested Stove Pipe:	
5 in., per 100 joints, .....	C. L. \$7.50
6 in., per 100 joints, .....	L. C. L. \$8.50
7 in., per 100 joints, .....	8.00 9.00
8 in., per 100 joints, .....	9.00 10.00
<b>Planes and Plane Irons—</b>	
Wood Planes—	
Bench, First quality 1 1/2 to 1 1/2 to 1 1/2 to 1 1/2	
Bench, Second qual. 1 1/2 to 1 1/2 to 1 1/2 to 1 1/2	
Molding, .....	10 to 2 1/2 to 10 to 55c
Bailey's (Stanley R. & L. Co.), .....	5 to 10 to 25 to 10 to 10c
Gage Self Setting, .....	35c
Union, .....	60c
<b>Iron Planes—</b>	
Bailey's (Stanley R. & L. Co.), .....	25 to 10c to 25 to 10c
Chaplin's Iron Planes, .....	50 to 10c
Miscellaneous Planes (Stanley R. & L. Co.), .....	20 to 10c to 20 to 10c
Sargent's, .....	60c
Union, .....	60c
<b>Plane Irons—</b>	
Wood Bench Plane Irons, .....	30 to 50 to 30 to 10 to 55c
Buck Bros, .....	30c
Stanley R. & L. Co., .....	20 to 10c to 20 to 10c
L. & J. White, .....	20 to 50 to 25c
<b>Planters, Corn, Hand.</b>	
Kohler's Eclipse, .....	per doz. \$9.00
<b>Plates—</b>	
Fellow, .....	lb. 3 1/2 to 4c
Self-Sealing Pie Plates (S. S. & Co.), .....	per doz. \$2.00
<b>Pliers and Nippers—</b>	
Button Pliers, .....	75 to 75c to 10c
Gas Burner, per doz., 5 in., .....	\$1.15 to
\$1.30; 6 in., \$1.35 to \$1.45	
Gas Pipe, 7 8 10 12 in.	
\$1.75 \$2.00 \$2.75 \$3.75	
Acele Nippers, .....	50 to 50c to 5
Bernard's:	
Parallel Pliers, .....	35c
Paragon Pliers, .....	50 to 55c
Lock Pliers, .....	50 to 60c
Lock Pliers, .....	35c

Pulleys—Single Wheel—			
Inch.....	2	2 1/2	3
Awning, doz.	\$0.50	.75	1.00
Hay Fork, Swivel or Solid Eye, doz., 4 in.	\$0.95	1.15	1.35
Inch.....	2	2 1/2	3
Hot House, doz.	\$0.60	.80	1.10
Inch.....	1 1/4	1 1/2	2
Screw, doz.	\$0.14	.17	.20
Inch.....	1 1/4	2	2 1/2
Side, doz.	\$0.27	.35	.45
Inch.....	1 1/4	1 1/2	2
Tackle, doz.	\$0.27	.37	.50
Stowell's:			
Ceiling or End, Anti-Friction.....	60¢		
Dumb Waiter, Anti-Friction.....	60¢		
Hay Fork, Anti-Friction, 5-in. Wheel, 1 doz.	\$1.20		
Electric Light.....	60¢		
Side, Anti-Friction.....	60¢		

Sash Pulleys—			
Common Frame; Square or Round End, per doz., 1 1/4 in., 1 1/2 in., 2 in., 2 1/2 in., 3 in., 4 in., 5 in., 6 in., 8 in., 10 in., 12 in., 14 in., 16 in., 18 in., 20 in., 22 in., 24 in., 26 in., 28 in., 30 in., 32 in., 34 in., 36 in., 38 in., 40 in., 42 in., 44 in., 46 in., 48 in., 50 in., 52 in., 54 in., 56 in., 58 in., 60 in., 62 in., 64 in., 66 in., 68 in., 70 in., 72 in., 74 in., 76 in., 78 in., 80 in., 82 in., 84 in., 86 in., 88 in., 90 in., 92 in., 94 in., 96 in., 98 in., 100 in.			
Auger Mortise, no Face Plate, per doz., 1 1/4 in., 1 1/2 in., 2 in., 2 1/2 in., 3 in., 4 in., 5 in., 6 in., 8 in., 10 in., 12 in., 14 in., 16 in., 18 in., 20 in., 22 in., 24 in., 26 in., 28 in., 30 in., 32 in., 34 in., 36 in., 38 in., 40 in., 42 in., 44 in., 46 in., 48 in., 50 in., 52 in., 54 in., 56 in., 58 in., 60 in., 62 in., 64 in., 66 in., 68 in., 70 in., 72 in., 74 in., 76 in., 78 in., 80 in., 82 in., 84 in., 86 in., 88 in., 90 in., 92 in., 94 in., 96 in., 98 in., 100 in.			
Auger Mortise, with Face Plate, per doz., 1 1/4 in., 1 1/2 in., 2 in., 2 1/2 in., 3 in., 4 in., 5 in., 6 in., 8 in., 10 in., 12 in., 14 in., 16 in., 18 in., 20 in., 22 in., 24 in., 26 in., 28 in., 30 in., 32 in., 34 in., 36 in., 38 in., 40 in., 42 in., 44 in., 46 in., 48 in., 50 in., 52 in., 54 in., 56 in., 58 in., 60 in., 62 in., 64 in., 66 in., 68 in., 70 in., 72 in., 74 in., 76 in., 78 in., 80 in., 82 in., 84 in., 86 in., 88 in., 90 in., 92 in., 94 in., 96 in., 98 in., 100 in.			
Acme.....	1 1/4 in., 1 1/2 in., 2 in., 2 1/2 in., 3 in., 4 in., 5 in., 6 in., 8 in., 10 in., 12 in., 14 in., 16 in., 18 in., 20 in., 22 in., 24 in., 26 in., 28 in., 30 in., 32 in., 34 in., 36 in., 38 in., 40 in., 42 in., 44 in., 46 in., 48 in., 50 in., 52 in., 54 in., 56 in., 58 in., 60 in., 62 in., 64 in., 66 in., 68 in., 70 in., 72 in., 74 in., 76 in., 78 in., 80 in., 82 in., 84 in., 86 in., 88 in., 90 in., 92 in., 94 in., 96 in., 98 in., 100 in.		
Common Sense, 1 1/4 in., 1 1/2 in., 2 in., 2 1/2 in., 3 in., 4 in., 5 in., 6 in., 8 in., 10 in., 12 in., 14 in., 16 in., 18 in., 20 in., 22 in., 24 in., 26 in., 28 in., 30 in., 32 in., 34 in., 36 in., 38 in., 40 in., 42 in., 44 in., 46 in., 48 in., 50 in., 52 in., 54 in., 56 in., 58 in., 60 in., 62 in., 64 in., 66 in., 68 in., 70 in., 72 in., 74 in., 76 in., 78 in., 80 in., 82 in., 84 in., 86 in., 88 in., 90 in., 92 in., 94 in., 96 in., 98 in., 100 in.			
For All-Steel, Nos. 3 and 7, 2 1/2 in., 3 in., 3 1/2 in., 4 in., 4 1/2 in., 5 in., 5 1/2 in., 6 in., 6 1/2 in., 7 in., 7 1/2 in., 8 in., 8 1/2 in., 9 in., 9 1/2 in., 10 in., 10 1/2 in., 11 in., 11 1/2 in., 12 in., 12 1/2 in., 13 in., 13 1/2 in., 14 in., 14 1/2 in., 15 in., 15 1/2 in., 16 in., 16 1/2 in., 17 in., 17 1/2 in., 18 in., 18 1/2 in., 19 in., 19 1/2 in., 20 in., 20 1/2 in., 21 in., 21 1/2 in., 22 in., 22 1/2 in., 23 in., 23 1/2 in., 24 in., 24 1/2 in., 25 in., 25 1/2 in., 26 in., 26 1/2 in., 27 in., 27 1/2 in., 28 in., 28 1/2 in., 29 in., 29 1/2 in., 30 in., 30 1/2 in., 31 in., 31 1/2 in., 32 in., 32 1/2 in., 33 in., 33 1/2 in., 34 in., 34 1/2 in., 35 in., 35 1/2 in., 36 in., 36 1/2 in., 37 in., 37 1/2 in., 38 in., 38 1/2 in., 39 in., 39 1/2 in., 40 in., 40 1/2 in., 41 in., 41 1/2 in., 42 in., 42 1/2 in., 43 in., 43 1/2 in., 44 in., 44 1/2 in., 45 in., 45 1/2 in., 46 in., 46 1/2 in., 47 in., 47 1/2 in., 48 in., 48 1/2 in., 49 in., 49 1/2 in., 50 in., 50 1/2 in., 51 in., 51 1/2 in., 52 in., 52 1/2 in., 53 in., 53 1/2 in., 54 in., 54 1/2 in., 55 in., 55 1/2 in., 56 in., 56 1/2 in., 57 in., 57 1/2 in., 58 in., 58 1/2 in., 59 in., 59 1/2 in., 60 in., 60 1/2 in., 61 in., 61 1/2 in., 62 in., 62 1/2 in., 63 in., 63 1/2 in., 64 in., 64 1/2 in., 65 in., 65 1/2 in., 66 in., 66 1/2 in., 67 in., 67 1/2 in., 68 in., 68 1/2 in., 69 in., 69 1/2 in., 70 in., 70 1/2 in., 71 in., 71 1/2 in., 72 in., 72 1/2 in., 73 in., 73 1/2 in., 74 in., 74 1/2 in., 75 in., 75 1/2 in., 76 in., 76 1/2 in., 77 in., 77 1/2 in., 78 in., 78 1/2 in., 79 in., 79 1/2 in., 80 in., 80 1/2 in., 81 in., 81 1/2 in., 82 in., 82 1/2 in., 83 in., 83 1/2 in., 84 in., 84 1/2 in., 85 in., 85 1/2 in., 86 in., 86 1/2 in., 87 in., 87 1/2 in., 88 in., 88 1/2 in., 89 in., 89 1/2 in., 90 in., 90 1/2 in., 91 in., 91 1/2 in., 92 in., 92 1/2 in., 93 in., 93 1/2 in., 94 in., 94 1/2 in., 95 in., 95 1/2 in., 96 in., 96 1/2 in., 97 in., 97 1/2 in., 98 in., 98 1/2 in., 99 in., 99 1/2 in., 100 in.			
Grand Rapids All Steel Nuts.....	40¢		
Ideal No. 13.....	1 1/4 in., 1 1/2 in., 2 in., 2 1/2 in., 3 in., 4 in., 5 in., 6 in., 8 in., 10 in., 12 in., 14 in., 16 in., 18 in., 20 in., 22 in., 24 in., 26 in., 28 in., 30 in., 32 in., 34 in., 36 in., 38 in., 40 in., 42 in., 44 in., 46 in., 48 in., 50 in., 52 in., 54 in., 56 in., 58 in., 60 in., 62 in., 64 in., 66 in., 68 in., 70 in., 72 in., 74 in., 76 in., 78 in., 80 in., 82 in., 84 in., 86 in., 88 in., 90 in., 92 in., 94 in., 96 in., 98 in., 100 in.		
Niagara.....	1 1/4 in., 1 1/2 in., 2 in., 2 1/2 in., 3 in., 4 in., 5 in., 6 in., 8 in., 10 in., 12 in., 14 in., 16 in., 18 in., 20 in., 22 in., 24 in., 26 in., 28 in., 30 in., 32 in., 34 in., 36 in., 38 in., 40 in., 42 in., 44 in., 46 in., 48 in., 50 in., 52 in., 54 in., 56 in., 58 in., 60 in., 62 in., 64 in., 66 in., 68 in., 70 in., 72 in., 74 in., 76 in., 78 in., 80 in., 82 in., 84 in., 86 in., 88 in., 90 in., 92 in., 94 in., 96 in., 98 in., 100 in.		
No. 26, Troy.....	1 1/4 in., 1 1/2 in., 2 in., 2 1/2 in., 3 in., 4 in., 5 in., 6 in., 8 in., 10 in., 12 in., 14 in., 16 in., 18 in., 20 in., 22 in., 24 in., 26 in., 28 in., 30 in., 32 in., 34 in., 36 in., 38 in., 40 in., 42 in., 44 in., 46 in., 48 in., 50 in., 52 in., 54 in., 56 in., 58 in., 60 in., 62 in., 64 in., 66 in., 68 in., 70 in., 72 in., 74 in., 76 in., 78 in., 80 in., 82 in., 84 in., 86 in., 88 in., 90 in., 92 in., 94 in., 96 in., 98 in., 100 in.		
Star.....	1 1/4 in., 1 1/2 in., 2 in., 2 1/2 in., 3 in., 4 in., 5 in., 6 in., 8 in., 10 in., 12 in., 14 in., 16 in., 18 in., 20 in., 22 in., 24 in., 26 in., 28 in., 30 in., 32 in., 34 in., 36 in., 38 in., 40 in., 42 in., 44 in., 46 in., 48 in., 50 in., 52 in., 54 in., 56 in., 58 in., 60 in., 62 in., 64 in., 66 in., 68 in., 70 in., 72 in., 74 in., 76 in., 78 in., 80 in., 82 in., 84 in., 86 in., 88 in., 90 in., 92 in., 94 in., 96 in., 98 in., 100 in.		
Tackle Blocks—See Blocks.			

Pumps—			
Cistern.....	60¢	60¢	1 1/2
Pitcher Spout.....	75¢	10¢	75¢
Wood.....	50¢	50¢	10¢
Pump Leathers, Lower and Plunger Valve—Per gro.....			
Inch.....	2	2 1/2	3
	\$2.20	2.50	3.00
Inch.....	3	3 1/2	4
	\$3.50	3.80	4.10
Barnes Dbl. Acting (low list).....	50¢		
Contractors' Rubber Diaphragm No. 2, B. & L. Block Co.....	\$1.00		
Flint & Walling's Fast Mail (low list).....	55¢		
Flint & Walling's Pitcher Spout.....	55¢		
Loud's Suction Pumps, U. R. Co.....	20¢		
Meyer's Pumps, low list.....	50¢		
Meyer's Power Pumps.....	50¢		
Meyer's Spray Pumps.....	50¢		

Punches—			
Saddlers' or Drive, good.....	65¢	70¢	
Spring, single tube, good quality.....	1.75	2.00	
Revolving (1 tubes).....	3.75	4.00	
Bemis & Call Co.'s Cast Steel Drive.....	50¢		
Bemis & Call Co.'s Check.....	50¢		
Bemis & Call Co.'s Spring.....	50¢		
Morrill's No. 1 (A. B. C.), 2 doz., \$15.00.....	50¢		
No. 2, 2 doz., \$22.50.....	50¢		
No. 2, Metal, 2 doz., \$45.00.....	50¢		
Beach Punch, each, \$10.00.....	50¢		
Niagara Hollow Punches.....	55¢		
Niagara Solid Punches.....	55¢		
Steel Screw, B. & K. Mfg. Co.....	40¢		
Tinners' Hollow, P. S. & W. Co., 35¢ each.....	40¢		
Tinners' Solid, P. S. & W. Co., 2 doz., \$14.00.....	60¢		

Rail— Barn Door, &c.—			
Cast Iron, Barn Door; Flange Screw Holes for Rd. Groove Wheels:			
	$\frac{1}{2}$ in.	$\frac{3}{4}$ in.	1 in.
	\$1.70	\$2.10	\$3.00 100 feet.
Angular for Sq. Groove Wheels:			
	Small	Med.	Large.
	\$1.00	1.95	2.70 100 feet.
Sliding Door, Brnz'd Wrt Iron, ft. 6 1/2			
Sliding Door, Iron Painted.....			
Sliding Door, Wrought Brass, 1 1/2 in.			
		1b.36c.	.30p
Allith Mtg. Co. Reliable Hanger Track			
	1 foot.		10p
Cronk's Double Braced Steel Rail, 1 foot.....			
			34p
Cronk's O. N. T. Rail, 100 ft. 1 inch, \$3.10, 1 1/2 inch, \$3.30, 2 inch, \$3.50, 2 1/2 inch, \$3.80, 3 inch, \$4.30.			
Lance Standard, 100 ft. ....			
			\$2.75
Lawrence Bros., 100 ft. ....			
			\$2.45
Lawrence Bros. New York, 100 ft. ....			
			\$3.45
McKinnley's Hinged Hanger Rail 1 foot, 11c.....			
			50p
McKinnley's None Better.....			
			\$2.84
Myers' Stayon Track.....			
			50c 100 feet.
Smith's Wrought Bracket, Plain.....			
			34p
Smith's Special.....			
			50p
Smith's Never Jump, per ft. 11c.....			
			50p
Smith's Plain Steel.....			
			30p
Smith's Milled Steel.....			
			43p
Stowell's Cast Rail.....			
			25p
Stowell's Cast, Plain.....			
			12p
Stowell's Wrought Bracket.....			
			25p
Swett's Hylo, per ft. 11c.....			
			50c 100 feet.
Swett's P. L. B. Steel Rail, 100 ft. \$3.00			



**Sliding Shutter—**

Reading list.....70¢10¢75¢  
R. & E. 1st.....33¢5¢  
Sargent's list.....50¢10¢

**Shells— Shells, Empty—**

Brass Shells, Empty:  
First quality, all gauges.....60¢5¢  
Climax, Club, Rival, 10 and 12 gauge.....65¢5¢

**Paper Shell, Empty:**

Acme, Ideal, Leader, New Rapid,  
Magic, 10, 12, 16 and 20 gauge.....25¢5¢  
Blue Rival, New Climax, Challenge,  
Monarch, Defiance, New Victor, K-  
post r, Yellow Rival, 10, 12, 14 and  
20 gauge.....25¢5¢  
Climax, Union, League, New Rival,  
10 and 12 gauge.....25¢5¢  
Climax, Union, League, New Rival,  
14, 16 and 20 gauge (\$7.50 list).....30¢5¢  
Expert, Metal Lined and Pigeon, 10,  
12, 16 and 20 gauge.....33¢5¢

**Shells, Loaded—**

Loaded with Black Powder.....40¢  
Loaded with Smokeless Powder,  
medium grade.....40¢5¢  
Loaded with Smokeless Powder,  
high grade.....40¢10¢10¢

**Shoes Horse, Mule, &c.—**

F. O. B., Pittsburgh:  
Iron.....per keg \$5.85  
Steel.....per keg \$5.60  
Burden's, all sizes, per keg.....\$3.90

**Shot—**

Drop, up to B, 25-lb. bag.....\$1.35  
Drop, B and larger, per 25-lb. bag \$1.60  
Buck, 25-lb. bag.....\$1.00  
Chilled, 25-lb. bag.....\$1.60  
Dust Shot, 25-lb. bag.....\$2.10

**Shovels and Spades—**

Association List, Nov. 15, 1902.....40¢

**Sieves and Sifters—**

Hunter's Imitation, gro. \$11.00 to \$11.50  
Buffalo Metallic Blued, S. S. & Co., per:  
14x16 16x18 18x20  
\$12.90 \$13.80 \$15.00

National Mfg. Co.:  
Victor.....per gro. \$12.00  
Surprise.....per gro. \$11.00  
No Name.....per gro. \$11.00  
Shaker (Barber's Pat.) Flour Sifters,  
per doz. \$3.00.....90¢

**Sieves, Tin Rim—**

Per dozen:  
Mesh.....16 18 20  
Black, full size.....\$1.20 1.25 1.30 1.35  
Plated, full size.....\$1.30 1.35 1.40 1.45  
Black, scant.....\$0.95 1.00 1.05

**Sieves, Wooden Rim—**

Nested, 10, 11 and 12 inch:  
Mesh 18, Nested, doz.....\$0.65 to \$0.75  
Mesh 20, Nested, doz......75 to .85  
Mesh 24, Nested, doz......90 to \$1.00

**Sinks—****Cast Iron—**

Standard list.....60¢10¢10¢  
Note:—There is entire uniformity  
in size used by jobbers.

**Sinks, Wagon—**

Cast Iron.....70¢10¢10¢  
Malleable Iron.....40¢10¢50¢  
Steel.....40¢10¢10¢

**Slates, School—****Factory Shipments.**

"D" Slates.....45¢  
Noiseless Slates.....60¢10¢10¢  
Wire Bound.....40¢

**Slaw Cutters—See Cutters.****Slicers, Vegetable—**

Sterling No. 10, \$3.00.....83¢

**Snaps, Harness—**

German.....40¢10¢10¢  
Covert Mfg. Co.:  
Derby.....30¢5¢25¢  
High Grade.....45¢  
Jockey.....30¢10¢  
Trojan.....45¢  
Yankee.....80¢5¢25¢  
Yankee, Roller.....30¢5¢25¢  
Covert's Saddlery Works:  
Crown.....80¢  
German.....80¢  
Model.....80¢  
Triumph.....80¢  
Oneida Community:  
Solid Steel.....60¢5¢  
Solid Steel.....60¢  
Sargent's Patent Guarded.....60¢5¢10¢

**Snaths—**

Scythe.....50¢50¢10¢

**Snips, Tanners'—See Shears.****Spoons and Forks—****Silver Plated—**

Good Quality.....50¢10¢10¢5¢  
Cheap.....60¢10¢10¢  
International Silver Co.:  
1847 Rogers Bros. and Rogers & Emill-  
ton.....40¢10¢  
Rogers & Bro., William Rogers Eagle  
Brand.....50¢10¢  
Anchor, Rogers Brand.....60¢  
Wm. Rogers & Son.....60¢10¢  
Stinson L. & Geo. H. Rogers Co.:  
Silver Plated Flat Ware.....60¢  
No. 17 Silver Plated Ware.....60¢10¢

**Miscellaneous—**

German Silver.....60¢10¢10¢  
Cartanagus Cutlery Co.:  
Yukon Silver.....50¢  
Shuon L. & Geo. H. Rogers Co.:  
German or Nickel Silver, Special list  
1. & 10¢

**Tinned Iron—**

Teas.....per gro. 45¢5¢  
Tables.....per gro. 90¢10¢10¢

**Springs— Door—**

Gem (Coll).....20¢  
Star (Coll).....30¢  
Torre's Rod, 39 in.....\$4.10  
Victor (Coll).....50¢10¢10¢

**Carriage, Wagon, &c.**

3/4 in. and Wider:  
Black or 1/4 Bright, lb.....5¢4¢  
Bright, lb.....5¢4¢  
Painted Seat Springs:  
1 1/2 x 2 x 26, per pr.....60¢5¢  
1 1/2 x 2 x 28, per pr.....60¢5¢  
1 1/2 x 3 x 28 and narrower, per pr.  
80¢10¢5¢

**Sprinklers, Lawn—**

Enterprise.....25¢20¢  
Mackay.....\$1.80  
Philadelphia No. 1, per doz. \$12; No. 2,  
\$15; No. 3, \$24.....30¢

**Squares—**

Nickel plated.....List Jan. 5, 1903.  
Steel and Iron.....70¢10¢  
Rosewood trial Try Square and T-  
Bevels.....60¢10¢10¢70¢  
Iron Hdl. Try Squares and T-Bevels.  
40¢10¢10¢10¢  
Disston's Try Sq. and T-Bevels.....70¢  
Winterbottom's Try and Miter.....  
40¢10¢10¢10¢

**Squeezers— Lemon—**

Wood, Common, gro. No. 0, \$5.25  
@ \$5.50; No. 1, \$5.25 to \$6.50.  
Wood, Porcelain Lined:  
Cheap.....doz. \$2.00 to \$2.75  
Good Grade.....doz. \$3.00 to \$5.50  
Tinned Iron.....doz. \$0.75 to \$1.25  
Iron, Porcelain Lined doz. \$3.90 to \$5.25

**Staples—**

Barbed Blind.....lb. 6¢10¢4¢  
Electricians', Association list.....  
80¢10¢10¢10¢  
Fence Staples, See Trade Report.  
Galvanized, loc less than Barb Wire.  
Polished 50c less than Barb Wire.  
Poultry Netting, Staples.....per lb.  
\$4 to \$5¢4¢  
Grand Crossing Tack Co.'s list.....80¢10¢

**Steels, Butchers'—**

Dick's.....30¢  
Foster Bros.....30¢  
Hartzell Cutlery Co.....40¢5¢  
C. & A. Hoffmann's.....40¢

**Steelyards—**

Blacksmiths.....40¢10¢50¢

**Stocks and Dies—**

Curtis Reversible Hatchet Die Stock.....25¢  
Derby Screw Plates.....25¢  
Gardner Die Stocks No. 1.....50¢  
Gardner Die Stocks, larger sizes.....40¢  
Green River.....25¢  
Lightning Screw Plate.....25¢  
Little Giant.....25¢  
Reece's New Screw Plates.....25¢30¢

**Stone—****Scythe Stones—**

Chicago Wheel & Mfg. Co.:  
Gem Corundum, 10 inch, \$5.00 per  
gro. 12 inch, \$10.00  
Pike Mfg. Co. 1901 list:  
Black Diamond S. S.....per gro. \$12.00  
Lamotte S. S.....per gro. \$11.00  
White Mountain S. S.....per gro. \$9.00  
Green Mountain S. S.....per gro. \$6.00  
Extra Indian Pond S. S.....per gro. \$7.50  
No. 1 Indian Pond S. S.....per gro. \$4.50  
No. 2 Indian Pond S. S.....per gro. \$4.50  
Leader Red End S. S.....per gro. \$4.50  
Balance of 1901 list 38¢5¢

**Oil Stones, &c.**

Chicago Wheel & Mfg. Co. 1901 list:  
Gem Corundum Oil, Double Grit.....50¢  
Gem Corundum "c. Single or Double  
Grit.....35¢  
Gem Corundum Slips.....35¢  
Gem Corundum Razor Hones.....50¢  
Pike Mfg. Co. 1901 list:  
Arkansas Stone, No. 1, 3 to 5 in. \$2.83  
Arkansas Stone, No. 1, 5 to 8 in. \$3.50  
Arkansas Slips No. 1.....\$4.00  
Lily White Washita 4 to 8 in.....60¢  
Rosy Red Washita 4 to 8 in.....60¢  
Washita Stone, Extra 4 to 8 in.....50¢  
Washita Stone, No. 1, 4 to 8 in.....40¢  
Washita Stone, No. 2, 4 to 8 in.....30¢  
Lily White Slips.....90¢  
Rosy Red Slips.....90¢  
Washita Slips, Extra.....90¢  
Washita Slips, No. 1.....70¢  
India Oil Stones (entire list).....25¢  
Hindustan No. 1, Regular.....\$1.50  
Hindustan No. 1, Small.....\$1.00  
Are Stones (all kinds).....35¢  
A key Oil Stones, ex. \$3.08 in.....\$3.00  
Queer Creek Stones, 4 to 8 in.....30¢  
Queer Creek Slips.....10¢  
Sand Stone.....5¢  
Belgian, German and Swaty Razor  
Hones.....40¢  
Natural Grit Carving Knife Hones,  
per doz.....\$3.00  
Quick Edge Pocket Knife Hones,  
per doz.....\$3.00  
Mounted Kitchen Sand Stone, per  
doz.....\$1.50

**Stoners— Cherry—**

Enterprise.....25¢30¢

**Stops Bench—**

Millers Falls.....15¢10¢  
Morrill's.....per doz. No. 1, \$10.00.....50¢  
Morrill's, No. 2, \$12.50.....50¢

**Straps— Box—**

Cary's Universal, case lots.....20¢10¢

**Hame—**

Covert's Saddlery Works.....60¢10¢

**Stretchers, Carpet—**

Cast Iron, Steel Points.....doz. 55¢60¢

Socket.....doz. \$1.75

**Stuffers Sausage—**

Enterprise Mfg. Co.....25¢25¢7¢4¢

National Specialty Mfg. Co., list Jan.  
1, '97.....30¢

**Supports, Porch—**

Hoffman's Porch Supports.....doz. 25¢

**Sweepers, Carpet—**

National Sweeper Co.: Per doz.

Marion, Roller Bearing, regular  
finishes, full Nickel.....\$24.00

Marion Queen, Roller Bearing,  
Fancy Veneers, full Nickel.....\$27.00

Monarch, Roller Bearing, Nickel.....\$22.00

Monarch, Roller Bearing, Japanned.....\$21.00

Marion Queen, Roller Bearing, Reg-  
ular Finishes, full Nickel.....\$24.00

Transparent, Roller Bearing, Plate  
Glass Top, Nickel.....\$32.00

Monarch, Extra, Roller Bearing.....\$26.00

Monarch Extra, Roller Bearing (17  
inch case), Japanned.....\$33.00

Perpetual, Regular Bearings, Nkl.....\$20.00

Perpetual, Regular Bearings, Jan.....\$17.00

NOTE:—Discount of 50c per dozen on  
three-dozen lots. Discount of \$1 per  
dozen on five-dozen lots.

**Tacks Brads, &c.—**

List Jan. 15, '99.

Carpet Tacks, American.....90¢25¢5¢

American Cut Tacks.....90¢30¢5¢

Sveedes Iron Tacks.....90¢30¢5¢

Sveedes Upholsterers' Tacks.....90¢15¢10¢5¢

Gimp Tacks.....90¢15¢10¢5¢

Lace Tacks.....90¢10¢5¢

Trimmers' Tacks.....90¢30¢10¢5¢

Looking Glass Tacks.....70¢10¢

Bill Posters' and Railroad Tack.....90¢15¢5¢

Hungarian Nails.....80¢30¢5¢

Common and Patent Brads.....80¢10¢

Trunk and Clout Nails.....60¢5¢

NOTE:—The above prices are for  
Straight Weights. An extra 5¢ is given  
Star Weights \*\* and an extra 10¢ 5¢ on  
Standard Weights.

**Miscellaneous—**

Double Point Tacks.....90 and 5 tens

Steel Wire Brads, R. & E. Mfg.  
Co.'s list.....50¢10¢10¢

See also Nails, Wire.

**Tanks, Oil—**

Emerald, S. S. & Co.....30-gal Each.

Emerald, S. S. & Co.....30-gal. \$4.25

Queen City S. S. & Co., 30-gal.....\$3.65

Queen City S. S. & Co., 60-gal.....\$4.50

**Tapes, Measuring—**

American Asses' Skin.....40¢10¢30¢

Patent Leather.....25¢50¢5¢

Steel.....10¢10¢5¢

Chesterman's.....25¢25¢5¢

Kaufel & Esser Co., Steel and Metallic,  
Lower list, 1890.....35¢

Lufkin's Steel.....33¢4¢35¢

Lufkin's Metallic.....30¢30¢25¢

**Teeth Harrow—**

Steel Harrow Teeth, plain or headed,  
1/2 inch and larger, per 100 lbs. \$2.50

**Thermometers—**

Tin Case.....80¢10¢30¢10¢5¢

Ties, Bale—Steel Wire,  
Single Loop.....80¢80¢10¢

Improved, Monitor, Cross Head,  
Etc.....70¢

**Ties, Wall—**

Cleveland Wire Spring Co.:  
Galv. Steel 5-32 x 8 1/4 in. \$1000.....\$10.00

Galv. Steel 5-32 x 8 1/4 in. \$1000.....\$11.00

Galv. Steel 5-32 x 1 1/4 in. \$1000.....\$12.00

Galv. Steel 5-32 x 1 1/4 in. \$1000.....\$14.00

**Tinners' Shears, &c.—**

See Shears, Tinners', &c.

**Tinware—**

Stamped, Japanned and Placed, sold  
very generally at net prices.

**Tips, Safety Pole—**

Covert's Saddlery Works.....60¢10¢

**Tire Benders, Upsetters,  
&c.—See Benders and Upset-  
ters, Tire.****Tools— Coopers'—**

L. & I. J. White.....20¢30¢25¢

**Saw—**

Atkins' Cross Cut Saw Tools.....40¢

Simonds' Improved.....33¢4¢

Simonds' Crescent.....25¢

**Ship—**

L. & I. J. White.....25¢

**Transom Lifters—**

See Lifters, Transom.

**Traps— Fly—**

Balloon, Globe or Acme.....doz. \$1.15 to \$1.25; gro. \$11.50 to \$12.00

Harper, Champion or Paragon.....doz. \$1.25 to \$1.40; gro. \$13.00 to \$13.50

**Game—**

Oneida Pattern.....80¢90¢5¢

Newhouse.....45¢45¢5¢

Hawley & Norton.....85¢5¢85¢10¢

Victor (Oneida Pattern).....75¢75¢5¢

Star (Blake Pattern).....80¢5¢80¢10¢

**Mouse and Rat—**

Mouse, Wood, Choker, doz, holes.....8 1/2¢9¢

Mouse, Round or Square Wire.....doz. 85¢90¢

Marty French Rat and Mouse Traps  
(Genuine):  
No. 1, Rat, Each \$1.12 1/2, per doz. \$12.00

No. 3, Rat, per doz. \$6.00; case of 50  
\$5.25 doz.

No. 3 1/2, Rat, per doz. \$4.75; case of 72  
\$4.25 doz.

No. 4, Mouse, per doz. \$3.50; case of 7  
\$2.75 doz.

No. 5, Mouse, per doz. \$2.75; case of 150  
\$2.25 doz.

Schuyler's Rat Killer, No. 1, per gr. \$30.00  
No. 2, per gr. \$30.00; Mouse, No. 3,  
\$10.00.....50¢

J. M. Mast Mfg. Co.: Per gro.

Blizzard.....No. 12, \$3.00 No. 1, \$9.50

Old Nick.....No. 30, 2.22 No. 2, 8.40

Joker.....No. 5, 2.10 No. 8, 8.40

Imp'd Snap Shot, Mouse, per gro., 2  
hole, \$2.40

Imp'd Snap Shot, Mouse, per gro., 4  
hole, \$4.20

**Trimmers Spoke—**

Bonney's Nos. 1 and 2.....40¢

Wood's E. I.....50¢

**Trowels—**

Disston Brick and Pointing.....30¢

Disston Plastering.....25¢

Disston "Standard Brand" and Gar-  
don Trowels.....35¢

Never-Break Steel Garden Trowels.....  
gro. \$6.00

Peace's Plastering.....30¢

Rose Brick and Plastering.....25¢5¢

Woodrough & McFarlin, Plastering.....25¢

**Trunks, Wagon, &c.—**

B. & L. Block Co.:  
New York Pattern.....50¢10¢

Western Pattern.....60¢10¢

Handy Trunks.....per doz. \$16.00

grocery.....per doz. \$15.00

Daisy

**Ware Hollow—****Cast Iron, Hollow—**

Stove Hollow Ware:	
Ground.....	60%
Ungrind.....	65%
White Enamelled Ware:	
Maslin Kettles.....	70%
Covered Ware:	
Tinned and Turned.....	40%
Enamelled.....	50%
See also Pots Glue.	

**Enamelled—**

Agate Nickel Steel Ware, list Nov. 1,	
01.....	50&55
Iron Clad Ware.....	70&105
Lava, Enamelled.....	40&105
Never Break Enamelled.....	50%

**Tea Kettles—**

Galvanized Tea Kettles:	
Inch.....	2 9
Each.....	50c 50c 65c

**Steel Hollow Ware.**

Avery Spiders & Griddles.....	65&65&55
Porcelain.....	90%
Never Break Spiders and Griddles.....	65&55
Never Break Kettles.....	60%
Solid Steel Spiders & Griddles.....	65&55
Solid Steel Kettles.....	60%

**Warmers, Foot—**

Pike Mfg. Co., Soapstone.....	40&40&10%
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**Washboards—**

Solid Zinc:	
Crescent, family size, bent frame.....	\$3.00
Red Star, family size, stationary	
protector.....	\$3.00
Double Zinc Surface:	
Saginaw Globe, family size, station-	
ary protector.....	\$2.65
Cable Cross, family size, stationary	
protector.....	\$2.90
Single Zinc Surface:	
Nalad, family size, open back perfo-	
rated.....	\$2.40

Saginaw Globe, protector, family	
size, ventilated back.....	\$2.25
Bras Surface:	
Brass King, Single Surface, open	
back.....	\$3.00
Nickel Plate Surface:	
No. 1001 Nickel Plate, Single Surface	
.....	\$3.00

**Washers—****Leather, Axle—**

Solid.....	85¢ 10¢ 10¢ 85¢ 10¢ 10¢ 10%
Patent.....	85¢ 10¢ 10¢ 85¢ 10¢ 10%
Coil: 3/4 1 1 1/4 1 1/2 Inch.	
9c 10c 11c 13c per 100	

**Iron or Steel—**

Size bolt.....	5-16 3/4 1/2 3/4 3/4
Washers.....	\$5.40 5.50 5.50 4.50 5.50
In lots less than one keg add 1/2c per	
lb., 5-lb. boxes add 1/2c to list.	

**Cast Washers—**

Over 1/2 inch, barrel lots, per lb.....	19¢@2c
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**Wedges—**

Oil Finish.....	lb, 2.90@3.10c
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**Weights—**

Covert's Saddlery Works.....	00&10%
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**Hitching—**

Per ton, f.o.b. factory:	
Eastern District.....	\$25.00
Western, Central and Southern	
Districts.....	\$25.00

**Sash—**

Eastern District.....	\$25.00
Western, Central and Southern	
Districts.....	\$25.00

**Wheels, Well—**

8-in., \$1.00 to 1.80; 10-in., \$2.00 to 2.25;	
12-in., \$2.45 to 2.65; 14-in., \$4.00 to 4.25	

**Wire and Wire Goods—**

Bright and Annealed:	
6 to 9.....	75¢ 65¢ 75¢ 65¢ 10%
10 to 18.....	75¢ 65¢ 75¢ 65¢ 10%
19 to 26.....	75¢ 65¢ 75¢ 65¢ 10%
27 to 36.....	75¢ 65¢ 75¢ 65¢ 10%

**Galvanized:**

6 to 18.....	70¢ 70¢ 5%
19 to 26.....	72 1/2¢ 72 1/2¢ 5%
27 to 36.....	72 1/2¢ 72 1/2¢ 5%

**Coppered:**

6 to 9.....	70¢ 70¢ 10%
10 to 18.....	70¢ 70¢ 10%
19 to 26.....	75¢ 75¢ 10%
27 to 36.....	75¢ 75¢ 10%

**Tinned:**

6 to 18.....	75¢ 75¢ 7 1/2%
19 to 26.....	72 1/2¢ 72 1/2%
27 to 36.....	70¢ 70¢ 5%

**Annealed Wire on Spools.....**

Brass and Copper Wire on Spools.....	60¢ 60¢ 5%
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**Brass, list Feb. 26, '96.....**

Copper, list Feb. 26, '96.....	15%
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**Cast Steel Wire.....**

Stub's Steel Wire.....	\$6.00 to 2.40%
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**Wire Clothes Line, see Lines.....**

Wire Picture Cord, see Cord.....	
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**Bright Wire Goods—**

List April 1, 1901.....	85¢ 10¢ 10% 90%
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**Wire Cloth and Netting—**

Galvanized Wire Netting.....	30¢ 10¢ 80¢ 17 1/2%
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**Painted Screen Cloth per 100 ft.....**

Light Hardware Grade.....	\$1.10 to 1.15
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**2-3 Mesh, Plain (sc. list) sq. ft.....**

2-8 Mesh, Galv. (sc. list) sq. ft.....	14¢@2c
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**Wire, Barb—See Trade Report.****Wrenches—**

Agricultural.....	75¢ 65¢ 75¢ 65¢ 10%
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**Baxter Pat'n S Wrenches.....**

Drop Forged S.....	15¢ 15¢ 5%
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**Acme.....**

Alligator.....	80¢ 10%
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**Alligator Pattern.....**

Bull Dog.....	70%
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**Bemis & Call's:**

Adjustable S Pipe.....	35¢ 55%
Bridge's Pattern.....	40%
Combination Black.....	40&55

**Combination Bright.....**

Cylinder or Gas Pipe.....	40%
Extra Heavy.....	45%
Herrick's Pattern.....	50%
No. 3 Pipe, Bright.....	55%

**Boardman's.....**

Coe's Genuine.....	40&10&5&5%
Coe's "Mechanics".....	40&10&5&5%
Donohue's Engineer.....	40&10%
Dudley Auto.....	50&5&50&10%
Eagle.....	50&10%

**Elgin Wrenches.....**

Elgin Monkey Wrench Pipe Jaws.....	30%
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**Gem Pocket.....**

Hercules.....	70%
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**W. & B. Machinist:**

Case lots.....	50&10%
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**Less than case lots.....**

Improved Pipe (W. & B.).....	50%
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**Solid Handles, P. S. & W.....**

Stillson.....	65%
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**Triumph.....**

Vulcan Chain.....	30%
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**Fruit Jar—**

Perfection Fruit Jar Wrenches.....	\$ gro. \$18.00
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**Triumph Fruit Can Wrenches.....**

Cap Wrenches.....	\$ gro. \$19.20
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**Triumph Fruit Jar Holders.....**

Triumph Fruit Jar Holders.....	\$ gro. \$30.00
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**Wrought Goods—**

Staples, Hooks, etc., list March 17	
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**Yokes Neck—**

Covert Saddlery Works, Trimmed.....	70%
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**Covert Saddlery Works, Neck Yoke**

Centers.....	70%
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**Yokes, Ox, and Ox Bows—**

Fort Madison's Farmers & Freighters.....	list not
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**Zinc—**

Sheet.....	lb 6 1/2¢ @ 6 1/2¢
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**PAINTS, OILS AND COLORS—Wholesale Prices.****White Lead, Zinc, &c.**

Lead, English white, in Oil.....	64¢ @ 93¢
Lead, American White, in Oil:	
Lots of 500 lb or over.....	64¢
Lots less than 500 lb.....	64¢
Lead, White, in oil, 25 lb tin	
pairs, add to keg price.....	3¢
Lead, White, in oil, 12 1/2 lb tin	
pairs, add to keg price.....	1¢
Lead, White, in oil, 1 to 5 lb as-	
sorted tins, add to keg price.....	1¢
Lead, White, Dry in bbls.....	51¢ @ 63¢
Lead, American, Terms: On lots of 500	
lbs, and over, 60 days, or 2% for cash if	
paid in 15 days from date of invoice.	
Zinc, American, dry.....	49¢ @ 44¢
Zinc, Paris, Red Seal, dry.....	53¢
Zinc, Paris, Green Seal, dry.....	53¢
Zinc, Antwerp, Red Seal, dry.....	53¢
Zinc, Antwerp, Green Seal, dry.....	53¢
Zinc, V. M. French, in Poppy Oil,	
Green Seal.....	19¢ @ 12 1/2¢
Lots of 1 ton and over.....	12 1/2¢ @ 12 1/2¢
Lots less than 1 ton.....	12 1/2¢ @ 12 1/2¢
Zinc, V. M. French, in Poppy Oil,	
Red Seal.....	10¢ @ 11 1/2¢
Lots of 1 ton and over.....	11¢ @ 11 1/2¢
Lots less than 1 ton.....	11¢ @ 11 1/2¢
Discounts.—V. M. French Zinc.—Dis-	
counts to buyers of 10 bbl. lots of one or	
assorted grades, 1% ; 25 bbls., 2% ; 50	
bbls., 4%.	

**Dry Colors.**

Black, Carbon.....	5¢ @ 8
Black, Drop, Amer.....	7¢ @ 17
Black, Drop, Eng.....	12¢ @ 21
Black, Ivory.....	4 1/2¢ @ 6
Lamp, Con.....	4 1/2¢ @ 6
Blue, Celestial.....	4¢ @ 6
Blue, Chinese.....	30¢ @ 35
Blue, Prussian.....	28¢ @ 34
Blue, Ultramarine.....	3¢ @ 12
Brown, Spanish.....	14¢ @ 1
Brown, Vandyke, Amer.....	14¢ @ 2 1/2
Brown, Vandyke, Foreign.....	9 1/2¢ @ 2 1/2
Carmine, No. 40.....	10¢ @ 2.05 @ 2.75
Green, Chrome, ordinary.....	3¢ @ 6 1/2

**Green, Chrome, pure.....**

Lead, Red, bbls, 1/2 bbls, and kegs:	
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Lots 500 lb or over.....	64¢
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Lots less than 500 lb.....	64¢
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**Litharge, bbls, 1/2 bbls, and kegs:**

Lots 500 lb or over.....	64¢
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Lots less than 500 lb.....	64¢
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**Ocher, Dutch Washed.....**

Ocher, American.....	10¢ @ 15.00 @ 15.00
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**Orange Mineral, English.....**

Orange Mineral, French.....	10¢ @ 11 1/2
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**Orange Mineral, German.....**

Orange Mineral, American.....	8¢ @ 9 1/2
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**Red, Indian, English.....**

Red, Indian, American.....	3¢ @ 3 1/2
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**Red, Turkey, English.....**

Red, Tuscan, English.....	7¢ @ 10
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**Red, Venetian, Amer.....**

Red, Venetian, English.....	100¢ @ 1.50 @ 2.00
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**Sienna, Italian, Burnt and**

Powdered.....	3 1/2¢ @ 7 1/2
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**Sienna, Ital., Raw, Powd.....**

Sienna, American, Raw.....	1 1/2¢ @ 2
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**Sienna, American, Burnt and**

Powdered.....	1 1/2¢ @ 2
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**Talc, French.....**

Talc, American.....	100¢ @ 1.35 @ 1.50
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**Terra Alba, French.....**

Terra Alba, English.....	95¢ @ 1.00
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**Terra Alba, American No. 1.....**

Terra Alba, American No. 2.....	45¢ @ 50
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**Umber, Turkey, Raw & Powd.....**

Umber, Bnt, Amer.....	1 1/2¢ @ 2
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**Umber, Raw, Amer.....**

Yellow, Chrome.....	10¢ @ 25
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**Vermilion, American Lead.....**

Vermilion, Quicksilver, bulk.....	40¢ @ 70
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**Vermilion, English, Import.....**

Vermilion, Chinese.....	\$1.05 @ 1.20
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**Colors in Oil.**

Black, Lampblack.....	12¢ @ 14
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**Blue, Chinese.....**

Blue, Lampblack.....	36¢ @ 40
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**Blue, Prussian.....**

Blue, Ultramarine.....	32¢ @ 36
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**Blue, Ultramarine.....****Brown, Vandyke.....**

Green, Chrome.....	9 1/2¢ @ 13
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**Green, Paris.....**

Sienna, Raw.....	10¢ @ 13
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**Sienna, Burnt.....**

Umber, Raw.....	9 1/2¢ @ 12
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**Umber, Burnt.....**

Miscellaneous.	
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**Barytes, Foreign.....**

Barytes, Amer. floated.....	19.00 @ 21.00
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**Barytes, Crude, No. 1.....**

Chalk, in bulk.....	3.50 @ 3.75
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**Chalk, in bbls.....**

China Clay, English.....	12.00 @ 17.50
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**Cobalt, Oxide.....**

Whiting, Common.....	4 1/2¢ @ 5
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**Whiting, Olders.....**

Whiting, extra Gliders.....	2 1/2¢ @ 7 1/2
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**Putty.**

In bladders.....	\$2.25
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**In bulk.....**

In cans, 1 lb to 5 lb.....	3.25
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